Title V 5-Year Needs Assessment

Iowa Department of Public Health

II. A. Needs Assessment Process

The Iowa Department of Public Health Bureau of Family Health (BFH) and Child Health Specialty Clinics (CHSC) embarked on a five-year needs assessment, beginning in January 2004 with a half-day retreat involving key administrative and staff personnel from both agencies. At that time, the state began preparation of a comprehensive assessment to identify the need in Iowa for:

- preventive and primary care services for pregnant women, mothers, and infants;
- preventive and primary care services for children; and
- services for children and youth with special health care needs.

II. B. 1. Process for Conducting the Needs Assessment

Participants at the first meeting created a master timeline for the months between January 2004 and June 2005 to coordinate needs assessment activities. Both BFH and CHSC agencies identified the staff that would ensure adherence to the timeline. Throughout the ensuing months, the two agencies worked in close collaboration, meeting regularly to coordinate need prioritization processes and to determine the new state performance measures to be utilized in Iowa during the next five years (FFY2006-2010). BFH and CHSC staff chose prioritization methods with the capacity to assess the need for direct health care, enabling, population-based, and infrastructure building services. The staff held discussions regarding public and private partnership, state and local government linkage, and citizen and family involvement in the needs assessment process.

Because of the continuing large number of health-related problem areas competing for resources, it was necessary to assign priority to the problems. The primary method chosen to prioritize problems for the 2005 Iowa Title V needs assessment replicated that used in 2000. The method was suggested by staff of the "Family Health Outcomes Project" centered at the University of California – San Francisco. The prioritization process was adapted from Peoples-Sheps, et. al. and offered as part of an on-line continuing education opportunity offered by the University of California – Berkeley titled, "Using Quantitative Data for MCH Planning: Problem Identification and Analysis" (1999). The specific steps of the prioritization process, as adapted for use in Iowa, are summarized here.

- Identify problem areas. – The planning group accomplished this step by selecting goals from the Maternal, Infant, and Child Health chapter of the "Healthy Iowans 2010" document (Iowa's statewide public health blueprint). The fifteen chapter goals address an array of widely agreed upon health problems encountered by women, children, children and youth with special health care needs, and families. To broaden the pool of considered problems, other chapters in "Healthy Iowans 2010" were reviewed, specifically chapters on Mental Health, Public Health Infrastructure, Disabilities, Access to Services, Family Planning,

Immunization, Nutrition, Oral Health, Substance Abuse, Tobacco, and Unintentional Injuries. Also included in the problem pool were the current Title V national and state priority needs. Status as a "Healthy Iowans 2010" goal or Title V priority need was felt to be sufficient qualification to be considered as a problem area for the prioritization process.

- Narrow the problem pool. The planning group eliminated duplicate problems (i.e. problems found in both Healthy Iowans 2010 and the Title V priorities needs) leaving a final pool of 16 problems.

- Select criteria to prioritize problems. This step was accomplished by a subset of the planning group. Criteria were chosen and reviewed for utility in rating the pool of 16 considered problem areas. In 2000, five criteria were used, but due to significant burden-related complaints from the raters, the criteria were reduced in 2005 from five to three.
    - Degree to which the problem is addressable by known interventions
    - Degree of health consequence of not addressing the problem
    - Degree of current demographic disparity regarding the problem

  The criteria address relevant qualities by which a particular problem area might be evaluated for importance. Although the criteria could be weighted according to agreed upon importance to the prioritization process, in this case all three criteria were weighted equally. A simple three-point scoring scale was used to assess how well each of the considered problems met each of the three criteria.

- Assign priority scores to problems in the final problem pool. A variety of MCH stakeholders assigned priority scores to the problems. Participating stakeholders were affiliated with the Iowa Dietetic Association; the Iowa MCH Advisory Council; the Iowa Association of Nurse Practitioners; the Iowa Chapter of the National Association of Social Workers; the Iowa Department of Public Health's Bureau of Family Health, Bureau of Nutrition and Health Promotion, and Oral Health Bureau; local contract child health and maternal health agencies; and Child Health Specialty Clinics' Parent Consultant Network and Leadership Council. Other individuals who completed the prioritization exercise on-line included family physicians, pediatricians, obstetrician-gynecologists, dentists, nurses, pediatric nurse practitioners, parents, dietitians, social workers, local Community Empowerment Area staff, child care providers, and others. A "Health Problem Prioritization Tool" was used to assign criteria-based scores to each of the considered problems. Individual rater scores were summed to calculate a grand total for each of the 16 considered problems. The grand totals for each problem were ranked from highest to lowest, with the highest score indicating highest priority.

- Finalize selection of priority problems. Although the quantitative prioritization process resulted in an ordinal ranking of problems, the planning group reassembled for debriefing discussions before finalizing the selection of priority needs. This step allowed expression of any previously withheld reservations or newly emerging considerations. This is also where high priority problems were eliminated from consideration if they closely matched existing Title V national priority needs.

- Formulate performance measures for all selected priority problems. An expanded group of key staff from the Iowa Department of Public Health and Child Health Specialty Clinics nominated, deliberated, and selected a performance measure by which each priority need will be monitored. In selecting performance measures, consideration was given to data availability and quality, relationship of performance measures to the larger priority need areas, and ability of the measures to facilitate partnerships to address needs.

In order to complete a balanced and comprehensive needs assessment the planning group chose to divide the prioritization activities described above into three levels. Each level was associated with a distinct purpose, process, and outcome. A summary description of the three levels appears in the table below.

SUMMARY OF LEVELS OF NEEDS ASSESSMENT			
	Purpose	**Process**	**Outcome**
Level One	Engage potential partners in determining MCH priority topics.	Ranking process utilizing baseline listing of a wide selection of MCH issues.	Consensus and support for priority topics (e.g. primary care access; early intervention services; quality preschool; data systems; maternal morbidity, etc.)
Level Two	Identify and prioritize statements of unmet needs based on the priority topics developed in level one.	Written and online prioritization survey.	Prioritized ranking of 16 statements of unmet need.
Level Three	Develop State Performance Measures for the highest ranked needs identified in level two that are not already addressed in National Performance Measures and Outcome Measures.	Structured retreat format bringing all partners together for deliberation and debate – the culmination of five-year needs assessment process.	Construction, consensus, and support of 10 State Performance Measures for FFY2006-FFY2010.

The following chart displays the timeline associated with the significant activities required to complete the prioritization process.

TIMELINE OF NEEDS ASSESSMENT ACTIVITIES	
Date	**Event**
September 2003	Preplanning Meeting: • process used for 2000 Title V needs assessment reviewed • workgroup members identified • comprehensive listing of key stakeholders created
November 2003	Preplanning Meeting: • process for 2005 needs assessment determined • planning for 2005 Iowa Child and Family Household Health Survey initiated

TIMELINE OF NEEDS ASSESSMENT ACTIVITIES	
	• collaboration with Healthy Iowans 2010 defined • collaboration with Community Health Needs Assessment and Health Improvement Planning process defined • integrated timeline created
January 2004	First Workgroup Meeting: • over-arching priorities drawn from the 2000 Iowa Child and Family Household Health Survey, Healthy Iowans 2010, and the National CSCHN, and Child Health Surveys • guidelines for choosing state priorities determined • collaboration with CYSHCN families described • prioritization process determined
February 2004	Contact made with key needs assessment participants, including professional practitioners and family stakeholders
March 2004	National and state-level assessment resources obtained
June 2004	Second Workgroup Meeting: • data sources reviewed • strategies to engage private partners established • three-tiered prioritization process finalized
July 2004	Listing of 20-30 comprehensive MCH issues compiled and ranking tool prepared
July – Sept 2004	Level 1 priority topics chosen through ranking process
September 2004	First Expanded Workgroup Retreat: • overview of needs assessment process provided • results of Level 1 prioritization process summarized • statements of unmet need developed, based on Level 1 priorities • Health Problem Prioritization Tool finalized for Level 2
Sept – Nov 2004	Level 2 priority needs chosen through prioritization process involving stakeholders throughout Iowa
December 2004	Potential strategies developed for measuring state performance related to each prioritized need
January 2005	Second Expanded Workgroup Retreat: • discussion of each prioritized need facilitated by stakeholders responsible for that program area • need statements finalized • related state performance measures finalized • data source for each state performance measure finalized
April 2005	Integrate findings of the Community Health Needs Assessment and Health Improvement Plan

Members of the initial needs assessment planning group, called ‘the workgroup”, were chosen carefully for their knowledge of the previous five-year needs assessment process, assessment of interim needs, and documentation of progress in meeting needs. Their participation was also valued because they had firsthand knowledge of overarching priorities learned from Healthy Iowans 2010, the 2000 Iowa Child and Family Household Health Survey, and the National

CSHCN. As the needs assessment process moved forward, the workgroup was expanded to ensure that a balanced and comprehensive process was implemented. The compositions of the workgroup and expanded workgroup appear in the table below.

COMPOSITION OF NEEDS ASSESSMENT PLANNING GROUPS			
Individual	**Representation**	**Workgroup**	**Expanded Workgroup**
Jane Borst	Title V populations	✓	✓
Jeff Lobas	Title V populations	✓	✓
Andy Penziner	CYSHCN & families	✓	✓
Gretchen Hageman	Title V; early childhood	✓	✓
Xia Chen	MCH epidemiology	✓	✓
Val Findley	families	✓	✓
Lucia Dhooge	child health	✓	✓
Barb Khal	CYSHCN; Early ACCESS	✓	✓
Marcus Johnson	Title V; contract administration	✓	✓
Kim Piper	genetics		✓
Tracy Rodgers	oral health		✓
Stephanie Trusty	maternal health		✓
Beth Jones	children's health insurance		✓
Janet Beaman	child health		✓
Angie Doyle-Scar	children's health insurance		✓
July Solberg	nutrition		✓
Sally Clausen	child care		✓
Madhu Gadia	nutrition and physical fitness		✓
Erin Barkema	child health		✓
Carrie Fitzgerald	social/emotional health		✓
Debra Kane	MCH epidemiology		✓
Sarah Taylor	physical fitness		✓

Overall, the prioritization process was well received by state and local partners. The work of the needs assessment spanned nearly 18 months, allowing for adequate time to complete each of the three levels of the phased process. The following list contains summaries of the strengths of the needs assessment process.

- A perceived strength of the needs assessment process was the amount of input from all levels of Title V state and local stakeholder agencies. Stakeholders gave input through verbal discussion, written and online survey, prioritization exercise, and consensus building activity. Staff used both qualitative and quantitative methods to gather input. Different groups, working independently, identified similar issues when ranking the highest priority needs. As priority needs were identified, related program and policy experts were brought into the process to assist with need identification and indicator development.
- The MCH Advisory Council, with broad membership representing professionals and families, was advised of the needs assessment activities and actively participated in the prioritization process. In addition, the process, the preliminary results, and the final report were distributed and presented at Council meetings. Similarly, the local contract

MCH agencies were routinely informed of the process and outcomes of the needs assessment. At key points during the process, input was requested from representatives of the local agencies and incorporated into the assessment. In Iowa, the Title V needs assessment is viewed as an ongoing process. The MCH Advisory Council and the local contract MCH agencies take part in assessment and planning activities every year.

- Parents of children and youth with special health care needs (CYSHCN) played a significant role in the five-year needs assessment. During the level two prioritization activities, members of the Parent Consultant Network of Child Health Specialty Clinics carefully considered proposed statements of unmet need. The parents not only completed the requested prioritization, but also convincingly advocated for inclusion of a previously unstated need related to CYSHCN. The participation of the parents of CYSHCN had a significant impact on the needs assessment process and was an improvement from an inadequate participation level in 2000.

The strengths documented in the list above indicate a strong overall needs assessment process. However, the following limitations of incremental steps in the process were identified during debriefing.

- Participant feedback indicated some confusion in the scoring of criterion #1 on the prioritization tool used during level two activities. Criterion #1 asked participants whether the goal was reachable by known effective interventions. The scoring scale indicated that this criterion would be given a "1" if few interventions existed, a "2" if promising interventions existed, or a "3" if known interventions existed, with the higher score related to a higher priority in the process. The scoring instructions were based on the rationale that more could be accomplished related to a problem with known interventions. Some participants disagreed with this rationale, thinking instead that more priority should be assigned a problem with few known interventions. Ultimately the planning group determined that this issue did not create a significant effect on the level two prioritization results.
- Analysis of the level two prioritization results revealed a difficulty in participant scoring of the need statement, "improve identification of racial and ethnic health disparities." The difficulty was that this need statement does not logically allow for rating it according to the criterion, "degree of current demographic disparity regarding the need." After discussion with prioritization participants, the planning group concluded that the scores were artificially low for the disparities need statement. This limitation in level two was corrected during level three activities where participants were instructed to "integrate disparity issues into each need statement and performance measure."

As the workgroups and statewide stakeholders progressed through the steps of the needs assessment, they used four sources of information extensively. First, the completed analysis of the **2000 Iowa Child and Family Household Health Survey** offered population-based information about the health of Iowa families. Second, the midcourse revision of **Healthy Iowans 2010** provided a timely source of needs identification because it occurred during the same time period as the Title V needs assessment. Third, national surveys, particularly the **National Survey of Children with Special Health Care Needs**, provided useful data comparisons between state and national rates. Fourth, the **Community Health Needs Assessment and Health Improvement Plan (CHNA & HIP)** provided an opportunity to drive

the examination of needs down to the local level in all of Iowa's 99 counties. The following sections describe these four sources in more detail.

2000 Iowa Child and Family Household Health Survey

The 2000 Iowa Child and Family Household Health Survey was a collaborative effort of the University of Iowa Public Policy Center, the Iowa Department of Public Health, and Child Health Specialty Clinics. The intent of the study was to provide information for policymakers and health planners about the status of families with children in Iowa from a social health perspective. It was funded, in part, by a competitive grant from the Maternal and Child Health Bureau, Health Resources and Services Administration, US Department of Health and Human Services.

The survey utilized a telephone interview conducted with a stratified random sample of 3241 families with children in Iowa. Each interview included approximately 125 questions, depending on the number of questions relevant to the family being interviewed. The survey instrument was developed by the research team after evaluating many existing survey instruments such as the National Survey of American Families (NSAF) and the National Health Interview Survey (NHIS). The screening instrument developed by the Foundation for Accountability (FACCT) was used to identify CYSHCN.

Calls to identify families with children in Iowa were made using a random list of phone numbers provided by a private vendor. To allow for regional comparisons within the state, 400 interviews were completed in each of eight regions. All regions consisted of multiple counties except for Polk and Scott counties, which were each considered their own region. The design of the study yielded a representative sample of families with children in Iowa. To ensure that the sample would include enough minority children to allow for comparisons of the results by race/ethnicity, an additional 457 households with minority children were called as part of an over sample after the initial interviews were completed. These calls were targeted to areas of the state with higher proportions of minority families.

The survey process began with a screening question to determine if the residence was home to a family with children. If so, the adult most knowledgeable about the health and health care of a randomly selected child under age 18 in the household was asked to complete the interview. The participation rate was 71 percent, reflecting 3241 completed interviews. The telephone interviews were conducted between May and October 2000 by the Center for Social and Behavioral Research at the University of Northern Iowa. The University of Northern Iowa Human Subjects review board approved the protocol regarding the telephone interview portion of the study.

The 2000 Iowa Child and Family Household Health Survey included questions about the topics listed below.

- Children's functional health status including the identification of children and youth with special health care needs
- Children's access to and utilization of health care services including:
    - Medical care
    - Dental care
    - Behavioral and emotional health care
    - Health insurance coverage of the child and parent

- School performance
- Child care
- Socialization and self-esteem of the child
- Family environment

Analysis of the 2000 Iowa Child and Family Household Health Survey produced the five reports listed below.

- Statewide Results
- Regional Results
- Health Insurance Coverage of Children in Iowa
- Children and youth with special health care needs
- Racial and Ethnic Disparities in the Health and Healthcare Use of Children in Iowa

Each of these reports can be found at the 2000 Iowa Child and Family Household Health Survey web site: http://ppc.uiowa.edu/health/iowachild2000/index.html

Healthy Iowans 2010 Midcourse Revision

As the Bureau of Family Health (BFH) and Child Health Specialty Clinics (CHSC) embarked on the Title V five-year needs assessment, another comprehensive assessment of the health of Iowans was getting underway. A midcourse revision of Healthy Iowans 2010, a statewide effort to improve the health of all Iowans, was initiated to examine accomplishments during the first half of the decade (2000-2005) and revise goals for the last half of the decade. As the midcourse revision of Healthy Iowans 2010 began, key collaborators from BFH and CHSC provided leadership in evaluating progress in the objectives related to young Iowa families.

Healthy Iowans 2010 was the result of the broadest health planning effort ever undertaken in Iowa. Healthy Iowans 2010 was the state counterpart to Healthy People 2010, a national plan that has guided federal resource allocation for disease prevention and health promotion for the first 10 years of the new century. Iowa's plan, coordinated by the Iowa Department of Public Health, was a collaborative effort among more than 200 organizations. Goals and action steps in the plan help Iowa continue to rank as one of the healthiest states in the nation. The IDPH hoped to maintain that momentum by revising and updating the plan for the second half of the decade. The midcourse revision resulted in a revised Healthy Iowans 2010 plan to be used as a major component in local decision-making and resource allocation.

Healthy Iowans 2010 was written at an unprecedented point in history—a new decade, a new century, a new millennium. The introduction to the document expressed an optimistic view of the future: "The 21st century," it says, "promises to add life as well as years through improved health habits coupled with medical advances. Scientists have suggested that if these changes occur, the definition of adulthood will also change. An extraordinary number of people will live fuller, more active lives beyond that expected in the late 20th century." At the same time, the country has spawned a new generation of health hazards. What we have done, according to Dr. William Dietz at the Centers for Disease Control and Prevention (CDC), is 'replace the diseases of deficiency with diseases of excess.' (*Newsweek*, August 2, 1999) New threats, like childhood obesity, can reverse progress made in the last century. This calls for concerted action.

Since Healthy Iowans 2010 was published in 2000, there are new challenges. Bio-emergencies and terrorism, obesity, early childhood issues, growth in the population of seniors, and the needs of new Iowans are a few examples. Two new chapters were written—one on vision and one on bio-emergencies. The 425 architects of the revised and updated Healthy Iowans 2010 were challenged to recognize the emerging health problems and, at the same time, continue the advances that have been made to keep Iowans healthy.

Goals and action steps relating to pregnant women, mothers, infants, children, and children and youth with special health care needs appear throughout the twenty-five chapters of the Healthy Iowans 2010 Midcourse Revision. However, specific MCH goals are aggregated in Chapter 11: Maternal Infant and Child Health. As seen in the following table, the Maternal Infant and Child Health Chapter Team represented a formal collaboration of MCH stakeholders across the public and private sector in Iowa.

HEALTHY IOWANS 2010	
CHAPTER 11: MATERNAL INFANT AND CHILD HEALTH	
TEAM MEMBERS	
Individual	**Representation**
Andy Penziner, chair	Child Health Specialty Clinics
Lenore Holte	Center for Disabilities and Development
Jen Van Liew, chair	Visiting Nurse Services (Title V grantee agency)
Karon Perlowski	Child and Family Policy Center
Jeffrey Lobas	Child Health Specialty Clinics
Gretchen Hageman	Iowa Department of Public Health; Iowa Community Empowerment
Bobbie Bohnsack	Iowa Department of Public Health, Tobacco Program
Ken Cheyne	Blank Children's Hospital; American Academy of Pediatrics (IA chapter)
Pat Hildebrand	Mid Iowa Community Action Agency (Title V grantee agency)
Stephanie Pettit	Iowa Department of Public Health, Child Death Review Team
Beth Jones	Iowa Department of Public Health, Covering Kids and Families (health care coverage)
Deb Renner	Genesis Medical Center; MCH Advisory Council member
Bob Bacon	Center for Disabilities and Development
Diane Clevenger	Iowa Health System
Pat Crosley	Magellan Behavioral Health Corp; MCH Advisory Council member; CYSHCN parent
Laurie Nash	Johnson County Community Empowerment
Dawn Mouw	Iowa Dept. of Public Health, Center for Congenital and Inherited Disorders
Kim Piper	Iowa Dept. of Public Health, Center for Congenital and Inherited Disorders
Janice Edmunds Wells	Iowa Department of Public Health, Office of Multicultural Health
Shelley Ackermann	IA Dept of Education, Part C Prog; MCH Advisory Council member; CYSHCN parent
Sally Nadolsky	Iowa Department of Human Services
Tricia Gilligan	Wellmark Blue Cross Blue Shield; MCH Advisory Council member
Ann Baber Wallis	University of Iowa, College of Public Health
Lisa Segre	University of Iowa, Center for Depression and Clinical Research
Elizabeth Schultz	Parent

The individuals listed above worked as a group to accomplish a comprehensive midcourse review of the Healthy Iowans 2010 goals relating to children and families. The chapter team expressed its hopes in the following portion of the Chapter 11 introduction.

This chapter is dedicated to promoting the health and well-being of Iowa's children and families. The boundaries of concern are wide and encompass individuals from women's health across the

lifespan to infants, children, adolescents, and young adults. Both health status and the health services that maintain and improve health are acknowledged. Special attention is given to the public health infrastructure that supports the provision of accessible and quality services. Children and youth with special health care needs, that is, children with long-term chronic and disabling conditions and representing approximately 17% of children (Iowa Child and Family Household Health Survey 2000), are the specific focus of a number of goals.

The complete Healthy Iowans 2010 Midcourse Revision, including Chapter 11, can be accessed at http://www.idph.state.ia.us/bhpl/healthy_iowans_2010.asp

Healthy Iowans 2010 is showcased at a statewide conference held every two years to bring together community public health leaders from across the state. The Governor's Conference on Public Health, commonly called the Barn Raising, is a tradition that started in 1997. The participants are people who build healthy communities and the term "barn raising" symbolizes this collective effort. The audience of 700-800 is largely drawn from Iowa with some representation from surrounding states. Barn Raising V: Building Iowa as a Healthy Community will be held on July 28 and 29, 2005 at Drake University in Des Moines. Invited guests are United States Surgeon General Richard H. Carmona and Dr. Julie L. Gerberding, director of the Centers for Disease Control and Prevention. The major presentations will be videotaped and placed on the conference web site to widen participation. Copies of the updated Healthy Iowans 2010 will be distributed at Barn Raising V. Conference participants will also be able to informally discuss chapters of Healthy Iowans 2010 with chapter facilitators during roundtables on the first day of the conference.

National Survey of Children with Special Health Care Needs

The National Survey of Children with Special Health Care Needs was performed in 2000-2001. The survey used the methods of the State and Local Area Integrated Telephone Survey (SLAITS) conducted by the National Center for Health Statistics (NCHS). It used the random-digit-dial sampling frame of the National Immunization Survey.

Over 2.6 million telephone numbers were randomly generated for inclusion in the National Survey of Children with Special Health Care Needs. Numbers were called to identify households with children under 18 years old who were then screened for special health care needs. In households where two or more children were identified as having special needs, one child was randomly selected to be the subject of the detailed interview. The goal was to complete approximately 750 interviews regarding a child with special health care needs per state and the District of Columbia. The number of households screened in each state in order to identify these 750 CYSHCN varied depending on the prevalence of CYSHCN in each state.

Children and youth with special health care needs were identified using the CYSHCN Screener developed by the Foundation for Accountability, which consists of five questions concerning common health care consequences experienced by CYSHCN. The questionnaire included sections regarding health and functional status, access to care, care coordination, satisfaction with care, health insurance coverage, adequacy of health care coverage, impact of the child's special needs on the family, and demographic information about the child, respondent, and household. The respondent was the parent or guardian in the household who was most knowledgeable about the health and health care of the children under 18 years of age. The

questionnaire was available for administration in Spanish, Vietnamese, Cantonese, Mandarin, Korean, Russian, Tagalog, French, Japanese, Polish, and Italian.

In general, data from the National CYSHCN Survey are subject to the usual variability associated with sample surveys. Nationally, 38,866 interviews were completed regarding children and youth with special health care needs. Small differences between survey estimates may be due to random survey error and not to true differences among children or across States. The precision of the survey estimates is based on the sample size and the measure of interest. Due to greater sample size, estimates at the national level are more precise than estimates at the state level.

Community Health Needs Assessment and Health Improvement Plan

The Community Health Needs Assessment and Health Improvement Plan (CHNA & HIP) is a public health initiative that enables communities across Iowa to assure the health of their citizens through the development of a comprehensive report on leading health indicators, health priorities, and health improvement plans.

The CHNA & HIP process has three modules:

- Community Contacts – This module is the directory of the local public health leadership and community partners who contributed to the CHNA & HIP process.
- Leading Health Indicators – This module is the repository for health and related data specific to the county. This data-driven profile was reviewed by the community contacts to determine community health priorities.
- Health Improvement Plans – This module is the blueprint for addressing community health priorities through structured health improvement plans.

Under Iowa Administrative Code 641-177, local boards of health are responsible for carrying out the three core functions of public health. CHNA & HIP support the core function of assessment. With local board of health leadership, the assessment and planning process included the entire community. The assessment is an ongoing process in the communities to ensure changes in public health needs are identified and addressed in a timely manner. The CHNA & HIP reporting tool allows communities to regularly update their reports on changes identified through continued assessment efforts.

The top six priority issues in the CHNA & HIP reports were: 1. Substance Use; 2. Obesity; 3. Chronic Disease; 4. Environmental – lead screenings; 5.Prenatal/Birth outcomes; and 6. Mental Health.

Results of the 2005 CHNA & HIP processes across Iowa were finalized and submitted to the Iowa Department of Public Health in February 2005. After state level analysis the reports were posted on the IDPH website at the end of April 2005. Each of the local needs assessments, identified by county, can be accessed on the IDPH website at http://www.idph.state.ia.us/do/CHNA/chnadata.htm.

II. B. 2. Needs Assessment Partnership Building and Collaboration

As described in the previous sections, collaborative partnerships were fostered throughout the needs assessment process. A key issue at the initial planning meeting was the desire to include input from Iowa families with children and youth with special health care needs. The primary strategy was utilization of the Child Health Specialty Clinics Parent Consultant Network as a vehicle to include this important group in the needs assessment process. Additionally, plans were made early in the process to collaborate with existing family advocacy groups in the state. Parent members of the MCH Advisory Council played an active part throughout the needs assessment process.

Another important focus of the early planning was the inclusion of key program staff of the Bureau of Family Health and Child Health Specialty Clinics on the primary workgroup. As the process moved forward, the workgroup was expanded to include all related program areas. Thus, the expanded workgroup benefited from expertise provided by program staff responsible for oral health, genetics, nutrition, child care, insurance, lead poisoning prevention, and other program areas related to the Title V populations.

Throughout the needs assessment process, the planning groups utilized varied strategies to engage Iowa's physician community in the process. Ultimately, three of the strategies proved to be successful. First, the planning group enlisted the aid of nurses and nurse practitioners to encourage physician participation. Second, implementation of an online prioritization survey resulted in participation by family practice physicians, OB/GYN physicians, and pediatricians. Third, active participation of the MCH Advisory Council ensured the input of the physician members throughout the process.

State and local partnerships were forged through development of documents used as sources of information for the needs assessment. Staff members from the Bureau of Family Health and Child Health Specialty Clinics played leadership roles in the review of the Maternal Infant and Child Health Chapter of the Healthy Iowans 2010 Midcourse Revision. Local boards of health in all 99 Iowa counties were responsible for completing the Community Health Needs Assessment and Health Improvement Plan for the local area. These sources of information were used extensively for Iowa's five year needs assessment and represent input from state and local public and private organizations.

II. B. 3. Assessment of Needs of the Maternal and Child Health Population

The introductory discussion above included a chart displaying the timeline associated with the significant activities required to complete the prioritization process. Additional details of specific activities associated with each of the three levels are provided in the following narrative.

Outcome of Level One Activities – Major Health Topics
Early in the needs assessment process the workgroup identified guidelines for choosing and prioritizing health topics related to Iowa's women and children. During level one activities, workgroup members agreed to:

- Identify populations with the greatest need;
- Consider indicators that are measurable;
- Consider indicators that have an intervention to address them;
- Consider prevention-focused indicators;
- Choose indicators with known etiologies;
- Choose those that can be affected in the five-year period;
- Choose measures that have an existing data source; and
- Consider equity among populations.

Before prioritization could begin, it was necessary to determine the major health topics encountered by Iowa's women, children, and CYSHCN. The Healthy Iowans 2010 Midcourse Revision, described previously, was the primary vehicle for compilation of a comprehensive data-driven pool of health problems for consideration. Data related to the Title V national and state priority needs were also examined to ensure completeness of the problem pool. The table below lists the final pool of sixteen major health topics carried forward for prioritization in level two of the needs assessment.

MAJOR MCH HEALTH TOPICS:
UNRANKED PROBLEM POOL
Primary care (access and quality)
Early intervention
Medical home (access and quality)
Behavioral health care (access and quality)
Specialty care (access and quality)
Preschool (access and quality)
Child care (access and quality)
Perinatal mortality
High risk pregnancy care (access and quality)
Data systems (access and quality)
Oral health care (access and quality)
Disparities (access and quality)
Parenting education (formal and informal)
Childhood obesity

Insurance coverage
Maternal depression

The problem ranking process provided needs-related information for all four pyramid levels as displayed in the next table. Although the problem statement examples have been classified in one or another pyramid level, the full extent of any given problem can involve more than one, if not all, pyramid levels.

EXAMPLES OF PROBLEMS RELATED TO MCH PYRAMID LEVEL			
Direct Health Care Services	**Enabling Services**	**Population Based Services**	**Infrastructure Building Services**
Early intervention	Parenting education	Child mortality	Data systems
Behavioral health	Medical home	Childhood obesity	Insurance coverage

The problem ranking process also provided needs-related information for all MCH population groups as displayed in the table below. Items in the "cross-cutting" column were seen as issues that related to more than one MCH population group.

EXAMPLES OF PROBLEMS RELATED TO MCH POPULATION GROUPS			
Pregnant Women, Mothers, Infants	**Children**	**CYSHCN**	**Cross-Cutting**
Maternal depression	Child care	Specialty care	Insurance coverage
Perinatal mortality	Childhood obesity	Early intervention	Oral health care

Outcome of Level Two Activities – Statements of Unmet Need

The activities of level two were divided into two steps. In the first step, each of the sixteen health topics in the problem pool above was developed into a specific statement of unmet need related to the MCH population groups. These statements of unmet need appear in the table below.

UNRANKED STATEMENTS OF UNMET NEED
Empower families to meet needs of their children
Increase access to pediatric specialty care

Increase early intervention for 0-3 year olds
Increase mental health providers for pregnant & postpartum women
Increase rate of children with adequate insurance coverage
Increase rate of primary care practices with medical homes
Improve access to oral health
Improve behavioral health early identification and referral
Improve data utilization for policy and program development
Improve health and safety in child care and preschool
Improve high-risk pregnancy identification and referral
Improve identification of racial and ethnic health disparities
Improve physical fitness of children
Improve quality of primary care
Reduce infant mortality
Reduce preventable child mortality

In the second step, the Health Problem Prioritization Tool discussed previously was used to determine a ranking for each of the statements of unmet need. Participants used the tool to score need statements based on three criteria. Each criterion was given one of three possible scores.

- Criterion #1, the degree to which the problem is addressable by known interventions, was scored 1 (few interventions exist), 2 (promising interventions exist), or 3 (known interventions exist).
- Criterion #2, the degree of health consequence of not addressing the problem, was scored 1 (minor consequences), 2 (moderate consequences), or 3 (major consequences).
- Criterion #3, the degree of current demographic disparity regarding the problem was scored 1 (nonexistent disparity), 2 (moderate disparity), or 3 (major disparity).

The following tables provide the results of the level two prioritization process. The first table displays the aggregated results from state and local agency staff and MCH Advisory Council members. These results were obtained during face-to-face meetings of the various groups.

LEVEL TWO PRIORITIZATION RESULTS
BFH Staff, CHSC Staff, MCH Advisory Council, and MCH Local Contract Agencies

Statement of Unmet Need	Prioritization Criteria			Total Score	Responses	Average Score
	Criterion #1	Criterion #2	Criterion #3			

Improve high-risk pregnancy identification and referral	211	216	198	625	81	7.72
Increase rate of children with adequate insurance coverage	204	216	203	623	81	7.69
Reduce infant mortality	198	207	191	596	80	7.45
Improve quality of primary care	191	204	198	593	80	7.41
Improve access to oral health	182	203	205	590	81	7.28
Reduce preventable child mortality	194	198	183	575	80	7.19
Increase early intervention for 0-3 year olds	200	190	182	572	80	7.15
Improve health and safety in child care and preschool	207	195	174	576	81	7.11
Improve behavioral health early identification and referral	185	202	182	569	81	7.02
Improve physical fitness of children	173	213	180	566	81	6.99
Empower families to meet needs of their children	179	195	183	557	80	6.96
Increase rate of primary care practices with medical homes	177	182	182	541	79	6.85
Increase mental health providers for pregnant & postpartum women	167	204	180	551	81	6.80
Increase access to pediatric specialty care	180	187	182	549	81	6.78
Improve identification of racial and ethnic health disparities	165	182	187	534	80	6.68
Improve data utilization for policy and program development	167	163	155	485	79	6.14

The next table displays results of the online survey of statewide stakeholders. Individuals and members of organizations throughout the state were invited to contribute to the prioritization process online. These invitations were extended through IDPH relationships with professional associations such as the American Academy of Pediatrics (Iowa Chapter), the Iowa Academy of Family Physicians, and the Iowa Association of Nurse Practitioners. The web-based strategy provided input from parents, family practice physicians, pediatricians, OB/GYN physicians, nurses, pediatric nurse practitioners, dietitians, social workers, and others interested in the health of Iowa children and families.

LEVEL TWO PRIORITIZATION RESULTS
Online Survey of Iowa Stakeholders

Statement of Unmet Need	Prioritization Criteria			Total Score	Responses	Average Score
	Criterion #1	Criterion #2	Criterion #3			
Increase rate of children with adequate insurance coverage	343	393	376	1112	143	7.78
Improve high-risk pregnancy identification and referral	352	375	368	1095	143	7.66

Improve physical fitness of children	343	406	339	1088	143	7.61
Increase early intervention for 0-3 year olds	360	379	342	1081	143	7.56
Improve access to oral health	332	348	379	1059	143	7.41
Reduce preventable child mortality	350	376	330	1056	143	7.38
Improve quality of primary care	338	377	337	1052	143	7.36
Empower families to meet needs of their children	314	366	365	1045	143	7.31
Improve behavioral health early identification and referral	287	374	352	1013	143	7.08
Improve health and safety in child care and preschool	353	334	326	1013	143	7.08
Reduce infant mortality	302	361	343	1006	143	7.03
Increase access to pediatric specialty care	310	343	343	996	143	6.97
Increase mental health providers for pregnant & postpartum women	287	350	353	990	143	6.92
Improve identification of racial and ethnic health disparities	282	326	355	963	143	6.73
Increase rate of primary care practices with medical homes	294	318	324	936	143	6.55
Improve data utilization for policy and program development	302	287	275	864	143	6.04

The final table displays aggregated results of all respondents to the level two prioritization process. These results were carried forward to level three where the need statements receiving the highest average scores were developed further, compared with existing national performance measures and outcome measures, and finally adopted as newly-developed state performance measures.

LEVEL TWO PRIORITIZATION RESULTS
All Respondents

Statement of Unmet Need	Prioritization Criteria			Total Score	Responses	Average Score
	Criterion #1	Criterion #2	Criterion #3			
Increase rate of children with adequate insurance coverage	547	609	579	1735	224	7.75
Improve high-risk pregnancy identification and referral	563	591	566	1720	224	7.68
Increase early intervention for 0-3 year olds	560	569	524	1653	223	7.41
Improve physical fitness of children	516	619	519	1654	224	7.38
Improve quality of primary care	529	581	535	1645	223	7.38
Improve access to oral health	514	551	584	1649	224	7.36

Reduce preventable child mortality	544	574	513	1631	223	7.31
Reduce infant mortality	500	568	534	1602	223	7.18
Empower families to meet needs of their children	493	561	548	1602	223	7.18
Improve health and safety in child care and preschool	560	529	500	1589	224	7.09
Improve behavioral health early identification and referral	472	576	534	1582	224	7.06
Increase access to pediatric specialty care	490	530	525	1545	224	6.90
Increase mental health providers for pregnant & postpartum women	454	554	533	1541	224	6.88
Improve identification of racial and ethnic health disparities	447	508	542	1497	223	6.71
Increase rate of primary care practices with medical homes	471	500	506	1477	222	6.65
Improve data utilization for policy and program development	469	450	430	1349	222	6.08

As discussed previously, members of the Parent Consultant Network of the Child Health Specialty Clinics played a significant role in the prioritization process. The members of the Network considered all statements of unmet need listed on the Health Problem Prioritization Tool and contributed their scores. Then they recommended that the lowest scored problem area related to data utilization be replaced by a new need statement, "improve services for youth with special needs transitioning to adulthood." The needs assessment work group accepted their recommendation and further accepted the national CYSHCN outcome regarding adolescent transition service systems as sufficiently representing this priority need.

As mentioned previously, work group members recognized a limitation of the level twoprioritization process during debriefing. The group concluded that the scores were artificially low for the need statement, "improve identification of racial and ethnic health disparities" due to a flaw in the prioritization tool. This weakness in the level two process was corrected during level three activities by requiring consideration of disparity issues related to each need statement. As seen below, this requirement was incorporated directly into the five guiding principles used during level three activities.

Outcome of Level Three Activities – State Performance Measures

Once the statements of unmet need were prioritized, members of the expanded workgroup met to examine each of the top 13 problems. State program staff responsible for the specific program area facilitated discussion regarding each problem. The group finalized need statements and related performance measures. The guiding principles listed below were observed throughout the level three process.

1. Disparity issues will be integrated into each needs statement and performance measure.
2. If a national performance measure (NPM) or outcome measure (OM) is sufficient to measure progress on the issue, preference will be given to using that NPM instead of creating a new state performance measure.
3. Unless specifically excluded, special populations such as CYSHCN and pregnant women will be assumed to be included in each newly created state performance measure.

4. Data that are currently available will be selected to measure progress on performance measures unless there is compelling evidence that new data are needed.
5. In all cases, partnerships with existing programs will be considered during the development of performance measures. When possible, performance measures will provide motivation to enhance existing partnerships.

The resulting need statements are listed in the center column of the table below. The column at the right indicates the disposition of each of the 13 qualifying statements of unmet need. Three need statements were determined to be sufficiently linked to current national performance measures. One need statement was linked to both a current national outcome measure and a new state performance measure (SPM). Nine need statements were linked solely to newly created SPMs.

IDENTIFICATION AND DISPOSITION OF PRIORITY NEEDS		
Problem	**Need Statement**	**Performance Measure**
Increase number of children with adequate insurance coverage	Increase health care access by addressing insurance coverage and financial barriers to care for children and their families.	**NPM #13**: Percent of children without health care insurance.
Improve high-risk pregnancy identification and referral	Assure that higher risk mothers and newborns deliver at appropriate level hospitals.	**NPM #17**: Percent of very low birth weight infants delivered at facilities for high-risk deliveries and neonates.
Increase early intervention for 0-3 year olds	Minimize developmental delay through early intervention services for children 0-3 years.	**New SPM**: Percent of children 0-3 years served by Early ACCESS (IDEA, Part C).
Improve physical fitness of children	All children and adolescents should be physically active for at least 30 minutes, limit screen time to no more than two hours, and eat five or more servings of fruits and vegetables each day.	**New SPM**: Number of Iowa counties that have at least one participating targeted community in the CDC nutrition and physical activity obesity prevention project.
Improve quality of primary care	Improve the quality of primary care for children in Iowa.	**New SPM**: Percent of Medicaid enrolled children ages 9-35 months receiving a blood lead test.
Improve access to oral health	Assure access to oral health care for children in Iowa.	**New SPM**: Percent of Medicaid enrolled children ages 1-5 years who receive dental services.
Reduce preventable child mortality	Reduce number of preventable deaths to children.	**NPM #10**: Rate of deaths to children aged 14 years and younger caused by motor vehicle crashes per 100,000 children.
Reduce infant mortality	Reduce the number of infant deaths due to prematurity.	**OM #1**: Infant mortality rate per 1,000 live births **& New SPM**: Percent of infant deaths due to prematurity.
Empower families to meet needs of their children	Improve the quality of family support and parenting education programs and services.	**New SPM**: Percent of Community Empowerment funded family support programs

IDENTIFICATION AND DISPOSITION OF PRIORITY NEEDS		
Problem	**Need Statement**	**Performance Measure**
		identified as evidence-based practices.
Improve health and safety in child care and preschool	Assure children enrolled in early care and education programs are in quality environments.	**New SPM**: Number of early care and education providers who receive child care nurse consultant training or services.
Improve behavioral health early identification and referral	Assure developmental evaluations are provided to Medicaid enrolled children 0-3 years.	**New SPM**: Percent of Medicaid enrolled children 0-3 years who receive developmental evaluations.
Increase access to pediatric specialty care	Assure access to pediatric specialty care for all children.	**New SPM**: Percent of children who needed care from a specialist who received the care without a problem.
Increase mental health providers for pregnant & postpartum women	Assure pregnant and parenting women are screened and referred to appropriate mental health services.	**New SPM**: Number of professionals trained on the use of appropriate maternal depression screening tools and the available referral resources.

The previous sections described activities leading to the determination of priority need statements related to Iowa's MCH population groups and disposition of each qualifying need statement. Results of the process are summarized in the table above. The next section describes the health status of Iowa's MCH population groups in relation to the priority needs. These major health issues are discussed using both qualitative and quantitative descriptions.

Need Statement: Increase health care access by addressing insurance coverage and financial barriers to care for children and their families
Performance Measure: Percent of children without health care insurance (NPM#13)
MCH Population Groups: Children and CYSHCN

This is one of three need statements that were determined to be sufficiently linked to current national performance measures. The rate of Iowa children under the age of 18 without health insurance has jumped after several years of decline. The percent of children under 18 years without health care insurance is 5.5 percent. As of early July 2005, data from the Current Population Survey for 2004 was not available. The number provided is a three year average uninsured rate. ***hawk-i*** and Medicaid enrollment is at an all time high with outreach activities through ***hawk-i*** outreach and Covering Kids and Families demonstrating success for enrolling children. We recognize this population still needs to be reached and continue to identify strategies to decrease uninsured rates. Activities related to National Performance Measure #13 will continue the effort to meet target objectives in the next five years.

Analysis of the 2000 Iowa Child and Family Household Health Survey highlighted differences between families of CYSHCN and families of children without special health care needs. According to the survey, 10 percent of the interviewed families with CYSHCN indicated that the

child was without health insurance at some point in the previous year. In comparison, 5 percent of families with no CYSHCN in the home indicated that the child was without health insurance at some point in the previous year.

Need Statement: Assure that higher risk mothers and newborns deliver at appropriate level hospitals
Performance Measure: Percent of very low birth weight infants delivered at facilities for high-risk deliveries and neonates (NPM #17)
MCH Population Group: Pregnant Women, Mothers, and Infants

This is one of three need statements that were determined to be sufficiently linked to current national performance measures. The objective for National Performance Measure #17 has been met. Of the 448 very low birth weight infants delivered in 2004, 95 percent were delivered at Level III, Level II Regional, or Level II facilities. Eighty-nine percent of very low birth weight infants were born in a Level II Regional or a Level III facility. The number of recognized Level III perinatal centers remained at 3, while Level II Regional facilities were 7, and Level II facilities were 11. In total, there were 84 hospitals in Iowa that provided maternity services. Activities related to National Performance Measure #17 will continue the effort to meet target objectives in the next five years.

Need Statement: Minimize developmental delay through early intervention services for children 0-3 years
Performance Measure: Percent of children 0-3 years served by Early ACCESS (IDEA, Part C) (New SPM)
MCH Population Group: CYSHCN

According to a report from the U.S. Department of Education, Office of Special Education Programs (OSEP) Iowa's Early ACCESS system served 1.11 percent of Iowa's 0-1 year old children and 2.07 percent of Iowa's 0-3 year old children in 2004. Thus, Iowa met the OSEP recommendation that early intervention programs serve 1 percent of children 0-1 and 2 percent of children 0-3 years old. Whether these are the correct targets for enrollment in Part C services is a question for further national level research.

Child Health Specialty Clinics and the Iowa Department of Public Health continue close collaboration with Early ACCESS to improve the early intervention system for children 0-3. Research has shown that for children with or at-risk for developmental delay, the earlier that intervention can be provided, the greater chance for the child's improved outcomes. By providing early intervention services to the child and family at the earliest possible time, potential later costs to society can be reduced.

Need Statement: All children and adolescents should be physically active for at least 30 minutes, limit screen time to no more than two hours, and eat five or more servings of fruits and vegetables each day.
Performance Measure: Number of Iowa counties that have at least one participating targeted community in the CDC nutrition and physical activity obesity prevention project (New SPM)
MCH Population Group: Children and CYSHCN

According to the 2002 CDC Pediatric Nutrition Surveillance System, 30 percent of low-income children aged 2-5 years in Iowa are overweight or at risk of becoming overweight and 61 percent of Iowa adults are overweight or obese. In Iowa the obesity rate in adults has increased by 70 percent from 1990 to 2002.

The January 2004 Obesity Research report estimated that Iowan's spent $783 million on obesity related medical expenditures in 1998. Taxpayers through the Medicaid and Medicare programs directly pay about half of that cost, $363 million.

The Iowa Department of Public Health received a four-year grant from CDC to build a comprehensive State Plan for Nutrition and Physical Activity Program to Prevent Obesity and Other Chronic Diseases. Iowa is working to increase the number of counties that will support and sustain the healthy lifestyle behaviors of eating five or more serving of fruits and vegetables daily and being physical active leading to healthy weights.

The Community Health Needs Assessment and Health and Improvement Plan from the local boards of health showed 63 counties will focus their efforts toward reducing the overweight population within their communities.

Need Statement: Improve the quality of primary care for children in Iowa
Performance Measure: Percent of Medicaid enrolled children ages 9-35 months receiving a blood lead test (New SPM)
MCH Population Group: Children and CYSHCN

Improving the quality of primary health care services for children is identified as a priority need for Iowa. Iowa's screening plan for preventive health services for children is consistent with standards established by the American Academy of Pediatrics. As identified in the needs assessment, quality improvement reviews of preventive care records for Medicaid eligible children suggest that lead screening is likely to be the last component of the comprehensive screen to be completed. Quality improvement chart reviews demonstrate a correlation between the completeness of the recommended preventive health screen and testing for lead poisoning. Based on this observation, blood lead testing rates were selected as a proxy measure for the quality of preventive and primary care for children.

Of 37,262 children born in Iowa in 1998, only 57.1 percent received a blood lead test before the age of six years. Of the children who were tested, 7.5 percent had blood lead levels greater than 10 micrograms per deciliter (µg/dL), which is the blood lead level used to define lead poisoning. This is more than three times the national average of 2.2 percent. The Medicaid population is of special concern because the prevalence of lead poisoning in Medicaid children is 2.5 times the prevalence of lead poisoning in non-Medicaid children.

Comprehensive health screening for children includes testing of blood lead levels. Iowa's screening plan for lead is consistent with standards established by the American Academy of Pediatrics (testing for all children by 12 and 24 months of age and also assessment and testing at ages 18 months, 3, 4, and 5 years for children at high risk). Thus, the measure of children

receiving a blood lead test can serve as an indicator of quality of primary care services provided for children. In addition, Iowa law requires that Medicaid children be tested at these ages. It was recommended by CDC to include children who may have been tested just prior to their first birthday. As a result, the Bureau of Lead Poisoning Prevention assesses rates for children 9-35 months of age.

Childhood lead poisoning has significant effects on the health of children and on community health. Lead has adverse effects on nearly all organ systems, especially on the developing brain and nervous system of young children. At blood lead levels as low as 10 micrograms per deciliter, children's intelligence, hearing, and growth are affected. In a community, the presence of lead-poisoned children can be associated with an increase in the number of children with developmental deficits and learning disorders.

The presence of lead-poisoned children requires substantial community public health resources for medical and environmental case management services. Most of Iowa's pre-1950 homes contain lead-based paint. Young children who live in pre-1950 homes become lead poisoned when they ingest paint chips, house dust, or exterior soil. Most lead-poisoned children demonstrate no visible symptoms. This magnifies the importance of having an effective program to prevent childhood lead poisoning including quality blood lead testing as a component of preventive health screening services.

The Community Health Needs Assessment and Health Improvement Plan indicated that 17 counties will address lead screening and follow-up. Most of the counties will focus on educating the health care professionals and parents on the importance of lead screening for children under six years old.

Need Statement: Assure access to oral health care for children in Iowa
Performance Measure: Percent of Medicaid enrolled children ages 1-5 years who receive dental services (New SPM)
MCH Population Group: Children and CYSHCN

Access to dental care for low-income families in Iowa is limited due to a number of barriers. These include lack of financial resources to pay for care, lack of knowledge of importance of good oral health, lack of dentists willing to see children under the age of three, shortage of dentists participating in the Medicaid program, shortage of dentists within the state, and issues of patient compliance. A statewide oral health survey conducted during the 2004-05 school year indicated that 30 percent of Iowa's third graders do not have dental insurance and that it had been more than three years since five percent of the third graders had seen a dentist.

The most promising program in Iowa for building local infrastructure has been the Iowa Access to Baby and Child Dentistry (ABCD) program, which focuses on improving access to oral health services for low-income children ages 0 to 21, with special emphasis on ages 0-5 years.

The Oral Health Bureau with Iowa Department of Public Health is addressing dental homes for young children. The bureau will develop a systems approach to build local oral health infrastructure. The project will help educate physicians about their role in oral health and

establishing dental homes for children. The local MCH agencies will provide leadership on educating physicians in their service area.

For the seventh consecutive year, the IDPH completed a survey to determine the prevalence of dental sealants on permanent molars of third-grade children in Iowa. The 2004 Sealant survey indicated that 39.9 percent of third-grade children had at least one sealant on a permanent first molar. Sixty-seven percent of the eligible students were screened (1,207 of 1,793). Thirty-one percent of the students participated in the free/reduced lunch program. Forty-six percent had private dental insurance, 26.4 percent paid for dental care out-of-pocket, and 18.2 percent had Medicaid or ***hawk-i*** (SCHIP) as their payment source.

In the Community Health Needs Assessment and Health Improvement Plan, four communities will focus on access to dental services for children and Medicaid clients. Most of these communities will work with their local MCH agency to recruit dentists to treat children young children and Medicaid clients.

Need Statement: Reduce number of preventable deaths to children
Performance Measure: Rate of deaths to children aged 14 years and younger caused by motor vehicle crashes per 100,000 children (NPM #10)
MCH Population Group: Children; CYSHCN; and Pregnant Women, Mothers, and Infants

This is one of three need statements that were determined to be sufficiently linked to current national performance measures. In Iowa, the objective for National Performance Measure #10 has not been met in recent years. The indicator value increased from 4.5 to 6.7 deaths per 100,000 children from 2003 to 2004. Activities related to National Performance Measure #10 will continue the effort to meet target objectives in the next five years.

Need Statement: Reduce the number of infant deaths due to prematurity
Performance Measures: Infant mortality rate per 1,000 live births (OM #1) & percent of infant deaths due to prematurity (New SPM)
MCH Population Group: Pregnant Women, Mothers, and Infants

Infant mortality is a critical indicator of the health of a population, as it reflects the overall state of maternal health as well as the quality and accessibility of primary health care available to pregnant women and infants. Advances in medical technology and access to care have produced declines in infant mortality rates across the country, including Iowa. Provisional data for calendar year 2004 point to a potential decrease in the rate of infant mortality per 1,000 births, from 5.7 in 2003 to 5.0 in 2004.

As described previously, the Healthy Iowans 2010 Midcourse Review was a significant source document for the Title V needs assessment. Healthy Iowans 2010 Goal Statement 11-1 is "Reduce the overall infant mortality rate to no more than 5 infant deaths per 1,000 live births, paying specific attention to the discrepancy of Black infant mortality." The eight action steps related to Healthy Iowans Goal Statement 11-1 are summarized in the table below.

HEALTHY IOWANS 2010

Goal Statement 11-1 Reduce the overall infant mortality rate to no more than 5 infant deaths per 1,000 live births, paying specific attention to the discrepancy of Black infant mortality.	
11-1.1 Action Step	…promote prenatal risk screening
11-1.2 Action Step	…increase proportion of women of childbearing age who take …folic acid
11-1.3 Action Step	…assist pregnant women to modify high-risk behaviors
11-1.4 Action Step	…continue metabolic newborn screening
11-1.5 Action Step	…increase the portion of infants who are breastfed
11-1.6 Action Step	…increase the portion of infants who are put to sleep on their backs in a safe sleeping environment
11-1.7 Action Step	…develop statewide autopsy and death scene protocols for sudden and unexpected deaths occurring in infancy
11-1.8 Action Step	…offer appropriate high-risk perinatal services to women experiencing multiple gestation pregnancies

The Community Health Needs Assessment and Health Improvement Plan indicated that 15 counties will focus on prenatal and birth outcome issues. Some examples of priority issues for these counties are low birth weight, teen birth rate, and tobacco use during pregnancy.

Need Statement: Improve the quality of family support and parenting education programs and services
Performance Measure: Percent of Community Empowerment funded family support programs identified as evidence-based practices (New SPM)
MCH Population Group: Children; CYSHCN; and Pregnant Women, Mothers, and Infants

Iowa currently does not have an integrated, comprehensive system approach to family support, home visitation, and parenting education. Most of Iowa's local home visiting programs and parenting education programs follow the model that meets the needs of the funding requirements. At the local level, Community Empowerment Areas are statutorily required to strive for spending 60 percent of their state funds on home visiting, family support, or parent education. Community Empowerment Areas use a variety of national models and community created models. Currently, Iowa supports the HOPES-HFA (Healthy Opportunities for Parenting to Experience Success – Healthy Families America) model through IDPH. Thirteen counties use this home visiting model. Additional counties use a HOPES-like model for their home visiting program. Counties use the HOPES-like model because of the cost and lengthy accreditation process

required by HOPES. There are also 64 Parents as Teachers (PAT) programs throughout the state. The locally designed models generally do not include an evaluation component or a preventive health component, which are included in evidenced based models.

In the Community Health Needs Assessment and Health Improvement Plan, three counties will address parenting and family support issues. These counties will focus on improving availability of parenting education and unifying parenting education classes in their communities.

Healthy Iowans 2010 Chapter 11 (Maternal Infant and Child Health) emphasized the importance of family support. As described in the following segment of the chapter 11 introduction, the vision for the chapter clearly involved Iowa families.

> *A unifying vision for this chapter is the concept "Family Quality of Life." This concept proposes that a primary role of maternal and child health (MCH) programs in Iowa is to support families who are by nature diverse in composition and structure. Families are important because it is within their structure that children form strong, stable, emotional attachments, and through them that children meet continuing physical, emotional and social needs. Family quality of life depends on roles and interactions, both within the family and between the family and the community, that influence the health and well-being of children. Despite a growing economy, the average income of Iowa families with children has remained essentially unchanged from levels of a decade ago (according to the U.S. Census Bureau). The percentage of Iowa children in poverty according to the 2000 U.S. Census was 10.7%. There are many other factors that may negatively impact family functioning. Substance abuse, family violence, mental illness, and inappropriate parental expectations are significant contributors. Social isolation and discrimination based on race, ethnicity or social status may hinder families' motivation and opportunity for healthy functioning. Families whose children have special health care needs are additionally affected by economic and emotional challenges. Even the best functioning families are likely to need outside help when caring for a physically or emotionally ill or injured child.*

Need Statement: Assure children enrolled in early care and education programs are in quality environments
Performance Measure: Number of early care and education providers who receive child care nurse consultant training or service. (New SPM)
MCH Population Group: Children; CYSHCN; and Pregnant Women, Mothers, and Infants

Iowa ranks in the top three states for children under age six whose parents are in the labor force. Seventy-seven percent of Iowa families with children 0-5 years old have both, or the only, parent working. The increase of working parents in the last decade has resulted in the need for child care arrangements for about 30,000 additional children in Iowa.

According to the 2000 Iowa Child and Family Household Health Survey, almost half (46 percent) of Iowa children under age 10 receive child care from someone other than a parent. Four percent of parents of CYSHCN were very dissatisfied with their child care arrangements

compared with only one percent of parents of other children. The parents of CYSHCN were more likely than parents of other children to report trouble finding child care when their child was sick (33 percent vs. 25 percent). About one-third of parents of CYSHCN had difficulty finding child care because of the child's special health care need.

About a third (32 percent) of children had parents with a problem finding child care so that they could go to work or school. For 15 percent, this was a big problem. In the previous year, almost one in four (23 percent) had trouble finding care when they had a sick child and needed to go to work or school. For 20 percent of children, a parent had wanted to stay home with his or her sick child in the previous year but was not able to get off work.

The Midwest Research Consortium on Quality in Child Care documented the status of quality in Iowa's early care and education programs. The 2002 study found poorer quality infant and toddler care in both center-based and home-based care in Iowa compared to other Midwest states. The study concluded that at the time of the survey, Iowa had fewer statewide initiatives to support quality or professional development of the child care workforce than other midwest states. The study concluded that quality could be augmented by strong regulations and enforcement, and initiatives that target quality and professional development.

Need Statement: Assure developmental evaluations are provided to Medicaid enrolled children 0-3 years
Performance Measure: Percent of Medicaid enrolled children 0-3 years who receive developmental evaluations (New SPM)
MCH Population Group: Children; CYSHCN; and Pregnant Women, Mothers, and Infants

In Iowa, approximately 18,000 children ages 0-3 years need mental health services each year. This means that one in five young Iowans experience the signs and symptoms of mental disorders. According to a Commonwealth Foundation Report, "12 to 16 percent of children experience developmental problems, only one-third of those children usually those with the most obvious conditions- are identified in pediatric practices prior to school entry."

Early findings of the Survey of Early Childhood Health (NSECH) suggest that there is work to be done nationally. "In surveys conducted by AAP, pediatricians reported that they routinely assess children's developmental milestones and parental concerns regarding development. Pediatricians also reported that they conduct clinical assessment of children's development. Some studies suggest that many parents do not understand what is meant by 'development'. Parents may recall an assessment being done, however, NSECH examined the extent to which parents report evidence that such an assessment was ever done.

- Parents of about 45 percent of children 4-35 months of age recall that a developmental assessment was being done.
- About one-third (35 percent) of young children have been asked by their health care providers to pick up small objects or do related tasks, suggesting that a developmental assessment was being carried out."

Healthy Iowans 2010 Goal Statement 11-7 is "increase to 70 percent the portion of children aged 0-3 served under Title V and Title XIX who receive regular developmental screenings for mental

and behavioral health issues from their primary care provider." The baseline for this goal statement is given as the national indicator of 57 percent reported in the article, "Parental Assessment of Development in the Pediatric Office" (Pediatrics, June 2004).

Research has shown that for children with or at-risk for developmental delay, the earlier that intervention can be provided, the greater chance for the child's improved outcomes. By providing early intervention services to the child and family at the earliest possible time, potential later costs to society can be reduced. Child Health Specialty Clinics and the Iowa Department of Public Health continue close collaboration with Iowa's Part C Program (Early ACCESS) to improve the early intervention system for children 0-3.

Need Statement: Assure access to pediatric specialty care for all children
Performance Measure: Percent of children who needed care from a specialist who received the care without problem. (New SPM)
MCH Population Group: Children and CYSHCN

Analysis of the 2000 Iowa Child and Family Household Health Survey provided information about the health status and related circumstances of CYSHCN and their families. The survey also highlighted differences between families of CYSHCN and families of children without special health care needs. Of special note in this discussion is item #2, "child had trouble getting specialty care when needed."

2000 IOWA CHILD AND FAMILY HOUSEHOLD HEALTH SURVEY		
Survey Item	**Families who have a CYSHCN**	**Families who DO NOT have a CYSHCN**
1. Child had unmet need for medical care	7%	2%
2. Child had trouble getting specialty care when needed	23%	11%

The National Survey of Children and youth with special health care needs of 2000 used a sampling frame that provided both national and state-specific estimates. Only families of CYSHCN were sampled, so comparisons cannot be made with families who do not have CYSHCN. However, the survey data allows comparisons to be made between the Iowa and full national samples.

National Survey of Children and youth with special health care needs		
Access to Care Survey Item	Iowa %	National %
Percent of children and youth with special health care needs with any unmet need for specific health care services.	10.6	17.7
Percent of children and youth with special health care needs with any unmet need for family support services.	3.8	5.1
Percent of children and youth with special health care needs needing specialty care who had difficulty getting a referral.	14.0	21.9
Percent of children and youth with special health care needs without a	12.1	9.3

usual source of care (or who rely on the emergency room).		
Percent of children and youth with special health care needs without a personal doctor or nurse.	8.3	11.0

Need Statement: Assure pregnant and parenting women are screened and referred to appropriate mental health services.
Performance Measure: Number of professionals trained on the use of appropriate maternal depression screening tools and the available referral resources. (New SPM)
MCH Population Group: Pregnant Women, Mothers, and Infants

The IDPH Women's Health Information System contained records for 9,344 women in 2004. The top needs listed by the women were emotional and social needs (7.6 percent), language/cultural barriers (3.9 percent), and domestic violence assistance (3.1 percent).

Depression is considered an underreported problem. Women report a reluctance to discuss their emotions during the perinatal period due to the perceived stigma associated with it. Many women do not realize that they are suffering from a treatable condition and are often left to deal with the problem on their own. Without appropriate treatment, perinatal depression can dramatically affect women and their families. Data from prenatal care surveys indicate the extent of the problem in Iowa. Over 15 percent of postpartum women completing a survey on their second postpartum day report feeling sad or miserable in the two weeks prior to completing the survey. Health care providers in Iowa indicate that they understand the importance of early screening and identification of perinatal depression. However, they are reluctant to screen and identify clients who may be at-risk for depression because of the providers' lack of awareness of available resources for client interventions. The Iowa Department of Public Health and the University of Iowa Center for Depression and Clinical Research will be collecting data through a physician survey in the next year to determine the baseline.

The Healthy Iowans 2010 Goal Statement for maternal depression is "Increase the number of accessible professionals who provide mental health services for women of reproductive age and their families." The eight action steps related to Healthy Iowans Goal Statement 11-9 are summarized in the table below.

HEALTHY IOWANS 2010 Goal Statement 11-9 Increase the number of accessible professionals who provide mental health services for women of reproductive age and their families	
11-9.1 Action Step	… determine capacity to provide mental health screenings
11-9.2 Action Step	…collaborate for designation of Mental Health Professional Shortage Areas
11-9.2A Action Step	…increase awareness about perinatal depression
11-9.2B Action Step	…promote use of assessment tools for postpartum depression

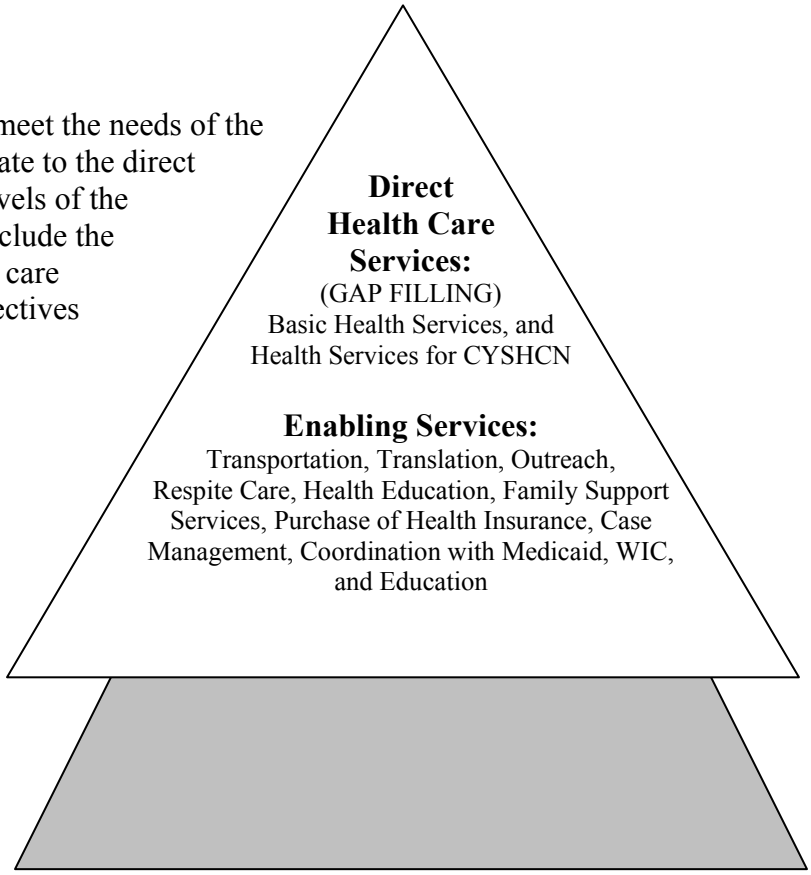
HEALTHY IOWANS 2010 Goal Statement 11-9 Increase the number of accessible professionals who provide mental health services for women of reproductive age and their families	
11-9.3 Action Step	…offer culturally sensitive mental health services
11-9.4 Action Step	…decrease the stigma attached to perinatal depression
11-9.5 Action Step	…promote a policy of mental health parity in insurance coverage
11-9.6 Action Step	…promote postpartum home visits

The Community Health Needs Assessment and Health Improvement Plan indicated that 14 counties will address mental health issues. Some examples of priority issues for these counties are: access to services and health professionals, limited number of rural psychiatrist for adults and children, and mental health screening.

II. B. 4. Examination of MCH Program Capcity by Pyramid Levels

a. Direct Health Care
b. Enabling Services

This section addresses Iowa's capacity to meet the needs of the state's MCH population groups as they relate to the direct health care service and enabling service levels of the MCH pyramid. The descriptions below include the state's concerns regarding access to health care and health-related services from the perspectives of financial access, cultural acceptability, availability of prevention and primary care services, and availability of specialty care services.



MCH Population Group: Pregnant Women, Mothers, and Infants

Family Planning

The Iowa Department of Public Health (IDPH) is one of two Title X grantees in Iowa. The IDPH family planning service area includes 45 of Iowa's 99 counties. The Family Planning Council of Iowa is the other Title X grantee in Iowa and its service area includes the remaining 55 counties. Both grantees provide services in Polk County which has the largest population of the counties in Iowa. Of the 45 counties served by the IDPH Family Planning Program, seven counties have full service clinics that are available at least once per week. Sixteen counties have periodic full service satellite clinics. Education and counseling clinics are offered in 27 counties with referral to local providers for clinical services. Nine rural counties have no family planning services available.

In October 2004, there were five counties within the IDPH family planning service area that were designated as low-income population Health Professional Shortage Areas (HPSA). Ten counties within the IDPH family planning service area were designated as geographic HPSAs.

In 2003, the Alan Guttmacher Institute estimated that 74,710 females within the IDPH family planning service area were in need of publicly supported contraceptive services. The IDPH Family Planning Program serves approximately 24 percent of those females. It is projected that increasing numbers of Hispanic women of reproductive age will need subsidized family planning services from the IDPH Family Planning Program in the foreseeable future.

Maternal Health Centers

Iowa's 25 Maternal Health Centers provide prenatal and postpartum care to Medicaid eligible and other low income women. Services include medical and dental assessment, health and nutrition education, psychosocial screening and referral, care coordination, assistance with plans for delivery, and postpartum home visiting. Modes of service delivery include traditional clinic settings and purchase of medical service models with active public health nursing participation. All of Iowa's 99 counties have access to publicly funded maternal health services. Funds are allocated per county based on a formula that reflects the level of need.

A competitive bid process held every five years by the Iowa Department of Public Health determines selection of local Maternal Health Centers. The IDPH Bureau of Family Health (BFH) monitors the contractual arrangements. Medical services provided by the Maternal Health Centers follow the standards of the American College of OB/GYN for ambulatory obstetric care. The BFH maintains a Title V funded contract with the University of Iowa, College of Medicine, Department of Obstetrics and Gynecology for consultation.

Iowa's Maternal Health Centers are critical to delivery of services at the local level. Additional details are provided in the organizational capacity section of Iowa's FFY2006 Title V application.

Healthy Families Line

Iowa State University Extension and the Iowa Departments of Public Health and Human Services collaboratively sponsor a toll-free health information and referral phone line called the Healthy Families Line. The confidential phone line is answered 24 hours each day and offers TDD (Telecommunications Device for Deaf Persons) service. Healthy Families Line staff members receive special training and have access to an electronic community resources database. While the phone line serves many functions, its primary purpose is to link families with community-based preventive health care and support services. In particular, the service links callers with local Title V MCH contractors.

In FFY2004 there were 6,035 calls to the Healthy Families Line, 1,313 more than the previous year. 3,321 (75 percent) of the calls were about the EPSDT Care for Kids Program, 469 (7 percent) were related to the ***hawk-i*** program, and 755 (13 percent) were about child care. There were 404 calls concerning women's health issues, 328 calls about cancer issues, 15 calls about

family planning, and 34 calls about pregnancy concerns. 3301 (86 percent) of the callers were covered by Medicaid and 474 (12 percent) of the callers had no health insurance.

Maternal Mortality

The Iowa Medical Society Maternal Mortality Study Committee is responsible for reviewing identified maternal deaths to determine:

- the cause of death,
- whether the cause of death was directly or indirectly related to the pregnancy,
- whether the death was preventable, if the cause of death was related to the pregnancy, and
- what educational efforts would assure greater prevention.

The IDPH Bureau of Family Health and the Bureau of Vital Records collaborate to identify maternal deaths. The review committee is appointed and staffed by the Iowa Medical Society in collaboration with the Iowa Department of Public Health (IDPH) and the University of Iowa College of Medicine. The committee meets when eight or more reports of maternal death have been received and their supporting records are available for review. Recently, the enhancements listed below were made to the structure of the Maternal Mortality Study Committee.

- Committee membership was expanded to include a pathologist and an anesthesiologist.
- The role of IDPH was expanded through enhanced identification of maternal deaths.
- The authority of IDPH administrative rules can be used to enforce the provision of records.
- Committee members identify which case studies should be highlighted for educational purposes.

Cases studies identified by the Maternal Mortality Study Committee as having education value will be published in the Iowa Perinatal Letter. This newsletter is published on the IDPH web site, http://www.idph.state.ia.us/hpcdp/perinatal_newsletters.asp, and distributed to all health care providers in Iowa who deliver babies.

Stillbirth

In response to legislative action in 2004, a work group was formed to bring together Iowa MCH leaders with an interest in and capacity to impact the incidence of stillbirth. The Stillbirth Work Group developed comprehensive guidelines to evaluate stillbirths as they occur. The information from each stillbirth evaluation is forwarded to the Iowa Registry for Congenital and Inherited Disorders. The registry staff abstracts the information and compiles the data into the registry.

When an intrauterine fetal death has occurred a careful evaluation of the mother, stillborn infant, umbilical cord and placenta is essential to develop an understanding of the cause. An evaluation of the stillbirth occurrence assists in discussions with the parents, assists in the planning of any future pregnancy and perinatal care, and contributes to the understanding of the causes of fetal disease and death. The terms stillbirth and fetal death are used interchangeably. For the activities of the Stillbirth Work Group, a stillbirth is defined by Iowa House File 2362 as "an unintended fetal death occurring after a gestational period of twenty completed weeks, or an unintended fetal death of a fetus with a weight of 350 or more grams." In Iowa, there are approximately 200 documented fetal deaths each year. Many of these deaths are "unexplained." It is hoped that an organized, purposeful evaluation of Iowa stillbirths will provide information helpful in the development of fetal death prevention programs.

Black/White Disparities in Infant Mortality in Iowa
Differences in rates of low birth weight account for the majority of black/white disparities in infant mortality in Iowa. Less adequate use of prenatal care, unaddressed maternal health problems, and lower levels of social support may be contributing factors. Since many of the determinants of infant mortality are amenable to change by existing public health programs, and since there are only about 20 black infant deaths annually, the scale of the problem is manageable as intervention strategies are targeted to serve black communities in the state. Details of current interventions can be found in Iowa's FFY2006 Title V application narrative for SPM #14: ratio of black-to-white preterm births.

Provisional data for calendar year 2004 point to a potential decrease in the rate of infant mortality for Iowa's population as a whole in the past year. The infant mortality rate per 1,000 births to all races decreased from 5.7 in 2003 to 5.0 in 2004. Provisional 2004 data indicate that the white infant mortality rate per 1,000 births decreased from 5.2 in 2003 to 4.8 in 2004. Provisional 2004 data indicate that the black infant mortality rate per 1,000 births decreased from 19.6 in 2003 to 9.6 in 2004. More information about these provisional data can be found in Iowa's FFY2006 Title V application narrative for OM #2: ratio of black infant mortality rate to white infant mortality rate.

Barriers to Prenatal Care
The purpose of the Iowa Barriers to Prenatal Care Project is to obtain information about women who deliver babies in Iowa hospitals. The project seeks to learn about women's experiences getting prenatal or delivery care during their current pregnancy. The project represents a collaboration of IDPH, the Statewide Perinatal Program, the University of Northern Iowa Center for Social and Behavioral Research, and all of Iowa's birthing hospitals. The Robert Wood Johnson Foundation funded the first three years of the project. The current funding is provided by the IDPH. The most current data are based upon 19,984 questionnaires completed in 2003.

In the last five years, the majority of mothers consistently reported that obtaining care was relatively easy as depicted in the table below.

Difficulty Getting Prenatal Care						
		1999	**2000**	**2001**	**2002**	**2003**
Very Easy		88%	89%	89%	90%	89%
Easy		8%	8%	7%	7%	7%
Moderately Easy		3%	3%	3%	3%	3%
Difficult		1%	1%	1%	1%	1%
Very Difficult		<1%	<1%	<1%	<1%	<1%

The next table displays the travel time to the place of prenatal care. The majority of mothers reported that they were within 30 minutes of their prenatal care provider.

Travel Time to Place of Prenatal Care						
		1999	2000	2001	2002	2003
< 15 Minutes		43%	45%	43%	41%	41%
15 - 30		42%	40%	44%	45%	45%
31- 60		13%	13%	12%	12%	12%
61 - 90		1%	1%	1%	1%	1%
91 - 120		1%	<1%	<1%	<1%	<1%
> 120 Min		1%	<1%	<1%	<1%	<1%

The travel time from home to the hospital remained consistent with the more than 80% of mothers traveling 30 minutes or less.

Travel Time from Home to Hospital						
		1999	2000	2001	2002	2003
< 15 Minutes		43%	47%	46%	45%	43%
15 - 30		41%	38%	39%	40%	41%
31 - 60		14%	13%	13%	13%	13%
61 - 90		1%	1%	1%	1%	2%
91 - 120		1%	<1%	<1%	1%	1%
> 120 Min		<1%	<1%	<1%	<1%	<1%

Unintended Pregnancy

According to the Barriers to Prenatal Care Project, differences in intention of pregnancy varied based on the age of the mother, as displayed in the table below. More than 75 percent of mothers over 25 indicated that they intended to become pregnant. In contrast, only fourteen percent of mothers younger than 18 indicate that they intended to become pregnant.

Pregnancy Intended by Mother's Age						
	< 18	18 - 19	20 - 25	26 - 30	31 - 35	> 35
Pregnancy Intended	14%	25%	52%	76%	79%	75%.

The next table suggests that mothers in younger age groups were more likely to discover their pregnancy in the second or third trimesters than those in older age groups.

Trimester Discovered Pregnancy by Mother's Age

	< 18	18 - 19	20 - 25	26 - 30	31 - 35	> 35
First Trimester	89%	93%	96%	98%	99%	98%
Second Trimester	10%	6%	4%	1%	1%	2%
Third Trimester	1%	1%	<1%	<1%	<1%	1%

According to the next table, mothers who did not intend to become pregnant report more sad and miserable feelings than those who wanted to become pregnant.

Feelings of Sadness or Depression by Intention to Get Pregnant	
Intention to Get Pregnant	**Sad or Miserable**
Intended	10%
Unintended	19%

Termination of Pregnancy

Iowa data on spontaneous abortions and terminations of pregnancy were first published for calendar year 2000. Termination of pregnancy surveillance is used to determine if there are areas of the state with higher than expected rates of spontaneous pregnancy loss. The surveillance gives state health planners information needed to address related issues regarding pregnancy loss if specific patterns are identified. The data can also be used to address issues related to family planning, maternal and child health, access to health care, quality of care, and sexuality education. The data are collected using the 25 maternal and child health regions as geographic identifiers. The Iowa Termination of Pregnancy Reports are published on the IDPH web site at http://www.idph.state.ia.us/common/pdf/publications/itoprept02.pdf.

In 2002, a total of 7,280 pregnancy terminations were reported in Iowa, representing a 6.4 percent increase from 2001. Induced terminations of pregnancy increased by 508 cases in 2002, representing an 8.9 percent increase from 2001. Spontaneous terminations of pregnancy decreased by 75 cases or 6.7 percent from 2001.

Medicaid/Birth Certificate Match

Since 1988, the Iowa Department of Public Health has been linking Medicaid pregnancy and birth claims data to birth certificates. Linking of the two data sets has allowed IDPH to evaluate the effect of Medicaid program eligibility and service benefit changes. For example, Medicaid has added enhanced services and case management for pregnancy women. Women who received enhanced services and prenatal case management were more likely to have received adequate prenatal care. Receipt of enhanced services and prenatal case management by pregnant women has also resulted in improved birth outcomes for women at high-risk for poor birth outcomes.

The most recent analysis is based on 2003 data. The linked file indicates that Medicaid is the primary source of payment for younger women and unmarried women. The rate of Medicaid

paid deliveries was higher for Black and Hispanic mothers, compared to white mothers. The following are recommendations for future Medicaid/Birth Certificate match analyses:

- Standardize the match process in order to increase the timeliness of the data analysis.
- Increase the match frequency to an annual basis.
- Continue to examine the relationship between enhanced services and birth outcomes.
- Increase the number and types of analysis conducted with these data in order to increase knowledge about both risk factors for poor birth outcomes and protective factors for healthy birth outcomes.

Iowa's efforts on this data integration project have been aided by MCHB technical assistance funding that paid for a peer-to-peer site visit to the Utah Department of Health.

Nutrition During Pregnancy

The CDC Pregnancy Nutrition Surveillance System (PNSS) monitors behavioral and nutritional risk factors among low-income pregnant women participating in the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) in Iowa. Low-income women enrolled in WIC experience improved dietary intake, appropriate prenatal weight gain, and earlier prenatal care than women who were not enrolled. Benefits are most apparent for women who enroll early in pregnancy; their infants are less likely to be premature or have a low birth weight.

PNSS data were collected from more than 18,100 women in 2003. Of the 18,100 women enrolled in the Iowa WIC Program:

- 43.8 percent had a pre-pregnancy BMI greater than 26.0. This included 30 percent who were obese (BMI > 29.0) prior to becoming pregnant.
- 44.8 percent had a greater than ideal weight gain during the pregnancy.
- 80 percent received prenatal care in the first trimester of the pregnancy.
- 43.1 percent smoked prior to their pregnancy and 29.9 percent of pregnant women enrolled in WIC smoked while they were pregnant.
- 19.4 percent drank alcohol prior to their pregnancy. Less than one percent drank during the last three months of the pregnancy.

MCH Population Group: Children

Child Health Centers

There are 25 agencies that provide child health services in Iowa's 99 counties for children and youth ages 0 to 21. The Child Health Centers provide health history, physical examination, vision and hearing screening, dental education and referral, health education, immunizations, developmental assessment, nutrition and psychosocial screening, and laboratory tests including lead screening. A competitive bid process held every five years by the Iowa Department of Public Health determines selection of local Child Health Centers. The IDPH Bureau of Family Health (BFH) monitors the contractual arrangements.

Iowa's Child Health Centers are critical to delivery of services at the local level. Additional details are provided in the organizational capacity section of Iowa's FFY2006 Title V application.

Uninsured Children

FFY03 data indicates that the percent of children without health insurance was 8.6 percent. Children in Iowa are eligible for public health insurance coverage through Medicaid (up to 133 percent of poverty) or the state's SCHIP program (133 to 200 percent of poverty). In May 2005, enrollment for Medicaid expansion was 15,057 and enrollment in the SCHIP program was 19,678. The Iowa Department of Public Health (IDPH) is engaged in aggressive outreach activities throughout the state to link families with public health insurance coverage. IDPH has fostered relationships with public and private funding sources to finance the outreach initiatives.

Iowa's SCHIP program, called Healthy and Well Kids in Iowa (***hawk-i***), is housed in the Iowa Department of Human Services (DHS). DHS contracts with the Iowa Department of Public Health for statewide ***hawk-i*** outreach activities. To fulfill its responsibilities, IDPH employs a statewide ***hawk-i*** outreach coordinator and contracts with local child health agencies for community outreach activities. ***hawk-i*** outreach focuses on developing effective strategies by working with schools, health care providers, faith based organizations, and special populations.

Covering Kids and Families in Iowa is a ***hawk-i*** partner project located in the Iowa Department of Public Health. Covering Kids and Families in Iowa is funded by a Robert Wood Johnson grant. Goals of the project are to:

1. design and conduct outreach programs in two pilot communities that identify and enroll eligible children into Medicaid and ***hawk-i***,
2. simplify the Medicaid and ***hawk-i*** enrollment process, and
3. coordinate existing coverage programs for low-income children.

The State Covering Kids and Families Coalition involves communities in promoting health care coverage for children and families. Roles of coalition members are to:

1. provide input & guidance related to grant activities,
2. participate in discussion on health-care issues and questions,
3. represent Covering Kids and Families within organizations and communities,
4. contribute to consensus building, and
5. advocate for strategies that build systems that support health insurance coverage for kids.

Additional information about the coalition can be found on the website: http://www.idph.state.ia.us/coveringkids/coalition.asp#mem.

Data from the 2000 Iowa Child and Family Household Health Survey indicate that there were approximately 32,500 eligible, yet uninsured, children when the survey was conducted. Barriers are evident for families trying to obtain health care coverage. Many of the children who do not qualify for Medicaid or ***hawk-i*** come from immigrant families. Eligibility requirements set by the federal government require individuals to be legal permanent residents for five years before they can qualify for public health care coverage programs. Other hard to reach populations are farmers and self-employed families. The high cost of premiums is a barrier for individuals purchasing health care coverage in the private market and for small employers purchasing plans

for their employees. Only 30 percent of self-employed and one employee firms offer health insurance. The number increases to 54 percent for firms with four to ten employees. Of those that offer health insurance to their employees, employers pay about 81 percent of the premium while the employee pays about 19 percent. Depending on what the worker earns, that can be a significant portion of their income.

Primary Care Access

In May 2004, the Primary Care Office of the Iowa Department of Public Health reported that the following primary care shortage area designations existed in Iowa:

- Primary Care HPSAs: There were 36 primary care Health Professional Shortage Areas (HPSA) in 53 of the 99 counties of Iowa. There were 23 geographic designations, 11 population group designations, and 2 facility designations.
- Medically Underserved Areas (MUA): Medically Underserved Area designations existed in 71 counties; with 55 counties receiving partial designations while 16 counties had full county designations.
- Mental Health HPSAs: There were twelve of sixteen Mental Health Catchment Areas designated as Mental Health HPSAs, encompassing 81 counties in Iowa.
- Dental HPSAs: There were 73 Dental HPSAs in the State of Iowa, consisting of 72 full county, low-income designation and one partial county low-income population designations.
- Governor's Designated Shortage Area: Of Iowa's 99 total counties, 59 rural counties were designated as Governor's Designated Shortage Areas. This state designation is for rural health clinic certification status.

Children's Mental Health Services

The MH/MR/DD/BI Commission (Mental Health/Mental Retardation/Developmental Disability/Brain Injury) focuses on the needs of severely disabled children and their families. In 2004, the commission began an initiative to address system design with the creation of the Children's Redesign Steering Committee. The mission of this effort is to develop a system of information, services, and supports that meet the needs of children with serious emotional disturbance, mental retardation, developmental disabilities, or brain injuries and their families.

In November 2003, the National Academy for State Health Policy (NASHP) approved the Iowa Department of Human Services' grant application for the Assuring Better Child Health and Development (ABCD II) initiative. Funded by the Commonwealth Foundation, the project intends to identify and implement policy and system changes to support the provision of preventive care by Medicaid providers to children 0 through 3. Iowa expects to move toward the development and infusion of healthy mental development services into the current EPSDT system.

The project uses a model that recognizes three tiers of healthy mental development services. The three-tier model, adapted to Iowa's current system, is described below:

- Level 1 Services - Preventive developmental services for all Medicaid eligible children including developmental/mental health surveillance, standardized developmental/mental health assessment, family risk screening and assessment, anticipatory guidance, and care coordination.

- Level 2 Services - Developmental services for children receiving Medicaid who are considered to be at-risk for developmental or social/emotional problems. Services would include less intensive interventions such as parent education and support, problem-focused counseling, and case management.
- Level 3 Services - Advanced developmental/mental health evaluation and intensive intervention services such as family counseling and other interventions currently provided through Iowa Early ACCESS and Medicaid's Mental Health Managed Care program.

The project will test a standardized set of *Level 1* and *Level 2* healthy mental development services. Financing mechanisms will be identified that can be applied statewide and tailored for individual communities. The project will build upon the existing state infrastructure to create public-private health provider partnerships.

The ABCD II project plan for the current year involves working closely with two demonstration sites. One demonstration site will serve children in an urban pediatric office and the surrounding local MCH region. The second demonstration site will serve children in a rural family practice office and the corresponding local MCH region. Consultants from NASHP and the Commonwealth Fund conducted a site visit in Iowa in June 2005. The consultants visited the rural demonstration site and met with representatives of the urban site at the IDPH offices. Results from the demonstration sites will be used to generate guidance on referral and intervention strategies. The guidance will be shared with physician practices, the Title V child health grantees, and other community partners.

Child Care

Iowa ranks in the top three states for percentage of children under age six whose parents are in the labor force. Seventy-seven percent of Iowa families with children 0-5 years old have both or the only parent working. The increase of working parents in the last decade has resulted in the need for child care arrangements for about 30,000 additional children. The number of regulated child care providers remains stable with approximately 1500 licensed child care centers and 5800 registered child development homes. Iowa is one of the few states that allow child care providers to care for children without participation in any regulatory requirements; child care providers caring for 5 or fewer children are not required to participate in child care regulations. Thus, the number of non-regulated child care providers cannot be quantified. There were 7,620 children enrolled in Head Start programs in 2002.

The Healthy Child Care Iowa (HCCI) campaign has been operational for nine years. The campaign provides child care nurse consultants (CCNC) to serve child care providers through the 25 local maternal and child health agencies. There are approximately 70 fulltime and part-time CCNC working in Iowa. They conduct trainings, on-site assessments, and consultations with all child care provider types. During fiscal year 2005, 41 percent of CCNC contacts with child care businesses occurred through direct contacts (face-to-face meetings, on-site consultation, or training events).

Oral Health

The Child and Adolescent Reporting System (CAReS) data for FFY2004 shows that 26,277 children received dental care coordination services through Title V child health contract agencies. Title V child health contractors play a crucial role in assisting families to understand the importance of oral health and to obtain a dental home. The Oral Health Bureau (OHB) provides routine technical assistance and consultation to the child health contract agencies. Poor patient compliance continues to be a barrier cited by dentists regarding accepting Medicaid and Title V payment for care.

In 2003, the Head Start/Early Head Start Oral Health Forum brought together several state early childhood stakeholders to discuss ways to improve access to oral health services for children. The OHB participated in the forum by facilitating roundtable discussions and group recommendations. Forum participants assessed the needs of children and developed action plans to address those needs. The Head Start/Early Head Start Oral Health Workgroup has continued to meet to develop and carry out the action plans. The OHB participates in the work group.

The need to provide proper oral health education to increase the oral health knowledge of parents through home visitors is a priority for the workgroup. A grant for the provision of a home-based family education and training program has been obtained, and the Healthy Smiles program will begin to address this issue. Targeted families include those enrolled in Early Head Start, Head Start or other home visitation and parent education programs.

In 2004, funding from the HRSA Children's Oral Healthcare Access Grant was used for a statewide survey to assess oral health education in statewide care, health, and education programs. The OHB partnered with the University of Iowa College of Dentistry to develop and implement the survey. Findings of the survey indicated that the most common forms of education currently provided are through brochures and one-on-one interaction. Barriers to oral health education included lack of funding, low perceived need by families, and lack of knowledge of resources. Half of the Head Start and childcare respondents were unaware of OHB resources. Forty-one percent of the survey respondents requested workshops and trainings; 61 percent requested email or electronic newsletters from the OHB.

MCH Population Group: CYSHCN

Integrated Planning and Evaluation Clinic (IEPC) Services

The IEPC is a community-based, multidisciplinary, evaluation service and is the cornerstone direct care service of Child Health Specialty Clinics (CHSC). A 2002-2003 program evaluation of the IEPC service illuminated needs and opportunities helpful for improving and updating this service. The evaluation used focus groups, written surveys, and member check methods to discover and confirm strengths, weaknesses, and opportunities. CHSC is using the following IEPC evaluation findings to plan and implement quality improvement measures.

- Staff development is needed to define and understand program outcomes, performance indicators, and data collection methods.

- Standardized data measurements and collection methods should be developed to improve data quality.
- A comprehensive database needs to be constructed to measure both clinical performance and patient outcomes.
- Child psychiatry specialist services need to be better linked to community-based care. Telehealth technology may help meet these gaps in service provision.
- Appointment availability needs to be analyzed as a resource allocation challenge. Ideas on how to reduce or eliminate waiting times need to be explored.
- Bill coding changes should be monitored closely and progress documented.
- Information technology, including internet-based telehealth, should be investigated as a means to improve operational efficiency.
- Marketing the IEPC service should be cautiously considered. Marketing may increase awareness of the service, but lack of ample appointment availability could result in frustrated referral partners and disappointed families.
- Promoting best practices addresses a number of IEPC improvement concerns. While the autonomy of clinic sites needs to be preserved, standardized procedures could improve clinic efficiency and services.

These evaluation results will assist with quality improvement and program-wide strategic planning. There were some methodological weaknesses in the IEPC evaluation, for example, bias due to use of staff-selected survey respondents. However, useful information – qualitative and quantitative – was obtained. The information will be used to improve the IEPC model in the context of CHSC's full scope of responsibilities for a statewide service system for CYSHCN.

Pediatric Behavioral Health Care Services

The 2000 Iowa Child and Family Household Health Survey asked all families about their need for pediatric behavioral health care services in the previous year and if behavioral care was needed, how much of a problem, if any, it was to get needed behavioral care. The following tables present the results.

Child needed behavioral care?	CYSHCN	All Other Children
Yes	30.1%	3.6%
No	69.9%	96.4%

Was there any time when your child needed but could not get behavioral care?	CYSHCN	All Other Children
Yes	11.8%	7.5%
No	88.2%	92.5%

These tables demonstrate that respondents with CYSHCN report much greater need for behavioral care services than respondents without CYSHCN. Furthermore, respondents with CYSHCN report a higher rate of not being able to obtain needed behavioral care services than respondents without CYSHCN. These data underlie and support CHSC's effort to increase access to pediatric behavioral health services using telehealth psychiatry consultation. The

clinical structure within which specific telehealth psychiatry consultation occurs will be the community-based network of Integrated Evaluation and Planning Clinics.

Care Coordination Services for CYSHCN

Care coordination is recognized as a fundamental enabling service for CYSHCN and their families. Care coordination promotes the effective and efficient organization and utilization of resources to assure access to necessary services. The following needs assessment data describes the status of care coordination in the lives of CYSHCN and their families.

Indicator or Survey Item	Indicator Value	Interpretation	Data Source
Services were usually or always organized for easy use	77.8% of responding families agreed	Although higher than the national response frequency (74.3%), we conclude that too many families are still experiencing difficulty organizing services for their CYSHCN.	National CYSHCN Survey (MCHB, 2001)
Professional help to organize or coordinate services for your CYSHCN was needed in the last year	12% of responding families agreed	Based on the survey's prevalence estimate of 127,000 CYSHCN in Iowa, this response translates to approximately 15,200 CYSHCN who may need the services of a professional care coordinator. Currently, CHSC provides care coordination services to about 3,000 children, thus potentially leaving over 12,000 families in need of care coordination.	Iowa Child and Family Household Health Survey (CHSC, Bureau of Family Health, University of Iowa Public Policy Center, 2000)
Help was needed to organize health care and other services for your child	17% of families using CHSC services agreed while 33% of families using SSI services agreed	These frequencies suggest that as many as ⅓ of families of CYSHCN need help to organize services, i.e. care coordination. Also, given that children on the SSI Program generally have more severe needs than the typical CHSC patient, these findings confirm the conventional wisdom that families of children with more severe health problems need more help coordinating services.	Mail Survey to Families Receiving CHSC Services and Families Receiving SSI (CHSC, 1996)
Effective care coordination was received when needed	42.0% of responding families agreed	Although higher than the national response frequency (39.8%), we conclude that far too many families are still experiencing difficulty obtaining effective care coordination when needed.	National CYSHCN Survey (MCHB, 2001)
As a primary care physician, you always or usually assign an office-based nurse to be a liaison between your CYSHCN's families and your practice	29% of responding primary care physicians agreed	This finding implies that over 70% of Iowa's primary care physicians rarely or never assign an office nurse to deliberately provide care coordination for CYSHCN. We interpret this as evidence of likely deficits in service comprehensiveness and continuity.	Mail Survey to all Iowa's Community-Based Pediatricians and Family Physicians (CHSC, 2000 and 2001)
Doctors' communication with other programs was excellent or very good	30.2% of responding families agreed	This is lower than the national response frequency (37.1%) and suggests that physicians are underperforming in planning, coordinating, and managing other aspects of needed care for CYSHCN.	National CYSHCN Survey (MCHB, 2001)

The data above support continuing care coordination need for CYSHCN and their families. The specific circumstance of care coordination as a needed physician-related service supports current CHSC activities related to spreading the medical home model and linking community-based

primary care practices to local Title V care coordination resources. The data also provide a needs-based justification for CHSC's care coordination role with medically fragile children enrolled in Medicaid Waivers; developmentally delayed children with health problems enrolled in Part C early intervention services; and chronically ill children discharged from medical centers back to their communities.

Birth to Five Services for CYSHCN

On the background of growing national and state emphasis on the importance of early childhood systems of care, CHSC has assessed its own early childhood direct and enabling services. An important influence in formulating CHSC's approach to the 0-5 year old population was the intention to enhance partnerships with other early childhood stakeholder organizations. The needs-based analysis resulted in several programmatic recommendations.

- The core Birth to Five services should be developmental screening, assessment, and follow-up for young children who are at-risk for developmental delay.
- Family support and care coordination are important enabling services that must be provided as needed.
- The Birth to Five Program must collaborate closely with Early ACCESS (Part C, IDEA) local primary care providers, and other organizations performing early identification and intervention services.
- The early childhood populations most in need of Birth to Five services are: children who are at risk for developmental delay; children who have been abused or neglected; and children who have been affected by exposure to drugs, either during pregnancy or later at home.

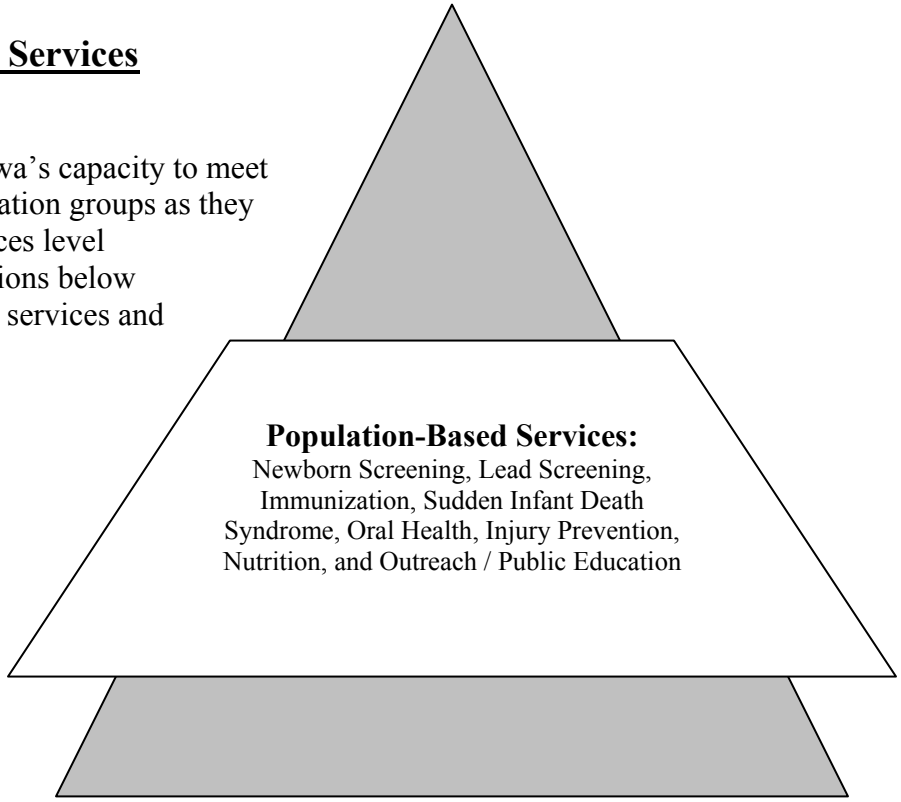
Nutrition Services for CYSHCN

As a result of budget constraints, CHSC's longstanding community-based nutrition consultation services were discontinued in 2004. A single statewide nutrition consultant remains on staff. She has analyzed CHSC's direct care nutrition service capacities in the light of diminished resources and has made several needs-based recommendations.

- CHSC community-based nursing staff will need to assume responsibility to screen clinic patients for potential nutrition-related problems.
- CHSC should establish partnerships with other community-based nutrition resources (e.g. WIC) as a referral resource for CYSHCN with nutrition problems.
- CHSC should encourage the Center for Disabilities and Development at the University of Iowa to expand their feeding team evaluation service to additional communities in the state.
- The CHSC statewide nutrition consultant should function as the frontline clinical nutrition advisor to all CHSC regional center nurses and parent consultants.

II. B. 4. c. Population-Based Services

The following section addresses Iowa's capacity to meet the needs of the state's MCH population groups as they relate to the population-based services level of the MCH pyramid. The descriptions below describe the management of related services and programs, IDPH coordination with other agencies and organizations in the provision of the services, geographic availability of the services, and funding mechanisms for the services.



MCH Population Group: Pregnant Women, Mothers, and Infants

Iowa Behavioral Risk Factor Surveillance System Survey

For more than 20 years, CDC's Behavioral Risk Factor Surveillance System (BRFSS) has helped states survey U.S. adults to gather information about a wide range of behaviors that affect their health. The primary focus of these surveys has been on behaviors that are linked with the leading causes of death—heart disease, cancer, stroke, diabetes, and injury—and other important health issues. These behaviors include:

- not getting enough physical activity,
- being overweight,
- not using seatbelts,
- using tobacco and alcohol, and
- not getting preventive medical care, such as flu shots, mammograms, Pap smears, and colorectal cancer screening tests.

In 2004, a total of 5,048 Iowans participated in BRFSS. The following list summarizes some of the findings related to the health of Iowans.

- Health Care Coverage: The percent of uninsured decreased in 2004 to 10.6 from 11.9 percent in 2003. The age group with the highest level of non-coverage was 18-24 year age group (24.2 percent). About 25.3 percent of the families with household incomes of $15,000 or less reported having no health care coverage.
- Cigarette Smoking: The percentage of those who currently smoke cigarettes decreased to 20.8 from 21.7 percent in 2003. Over 26 percent of the 18-24 year olds currently smoke. The group with less than a high school education had a higher percent of current smokers than any other group (31.7 Percent).
- Alcohol Consumption: In 2004, 56.9 percent of Iowans reported that they had at least one drink of alcohol in the past 30 days. Nineteen percent of all adult Iowans reported at least one binge episode in the past 30 days. A binge episode is defined as having five or more drinks on one occasion.
- Body Weight: In 2004, 37.4 percent of adult Iowans were considered to be overweight, and 23.5 percent were considered to be obese. The total figure for people who were over their ideal health weight was 60.9 percent.

Early Hearing Detection and Intervention

For the past several years, IDPH has taken a leadership role in establishing a quality system for Early Hearing Detection and Intervention (EHDI) in Iowa.

In January 2004, Iowa implemented EHDI legislation that mandates every newborn be screened for hearing loss prior to hospital discharge and that the screening results be reported to IDPH within six days of the child's birth. The legislation also requires that the results of any rescreens and diagnostic assessments be reported to IDPH for any child under three years of age.

In April 2005, the Maternal and Child Health Bureau, U.S. Department of Health and Human Services, Health Resources and Service Administration (HRSA) awarded an Early Hearing Detection and Intervention grant to Iowa. The grant was awarded to Child Health Specialty Clinics (CHSC) in the amount of $139,000 each year for the three-year period of April 2005-March 2008.

The activities of the grant focus on reducing the number of infants who are "lost" in the system, therefore delaying the provision of early intervention services. The five goals identified in the grant are listed below.

- All newborns will be screened appropriately prior to hospital discharge.
- All audiologic diagnoses will occur before children are three months of age.
- All eligible children will be enrolled in an early intervention program (Part C, Early ACCESS) before six months of age.
- All families with children 0-3 who are deaf or hard-of-hearing or are at risk for late-onset hearing loss will be linked to a medical home.
- All families with children 0-3 who are deaf or hard-of-hearing will receive family-to-family support.

IDPH recently entered into a three-year cooperative agreement with the Centers for Disease Control and Prevention. The activities of the agreement focus on developing and implementing a statewide EHDI surveillance system. The goals of the project are to:

- Complete the statewide implementation of the EHDI data system;
- Facilitate data integration linkages with related screening, tracking, and surveillance programs;
- Maximize the use of EHDI data for statewide and local decision making; and
- Evaluate the Iowa EHDI system based on the performance indicators set forth in the National EHDI Goals and utilize the results to establish project sustainability.

The Iowa EHDI Advisory Committee, created in January 2000, is made up of key EHDI stakeholders and continues to meet on a quarterly basis. The committee provides policy recommendations to CHSC and IDPH to assist with the planning, implementation and evaluation of the HRSA grant and the CDC cooperative agreement.

Iowa Review of Family Assets
The Iowa Review of Family Assets (IRFA) was developed by IDPH in conjunction with the Iowa Hospital Association to enhance discharge planning in hospital obstetrical units. It is an anonymous web-based survey completed by new parents before they are discharged from the hospital. When parents finish the survey their responses are matched with a database containing community resource information, and a personalized family profile is printed for them. The profile includes appropriate community resource information and educational materials. Parents are encouraged to share their profile with their nurse or doctor so that discharge planning can be more precise in addressing their needs.

The IRFA has been pilot tested in five hospitals. Feedback from hospital staff members and an outside reviewer indicate that revisions are needed. This feedback was used to develop a plan for changes that will make the program more appealing. Program staff members are working with the IDPH Bureau of Information Management to determine how these changes can be made.

Members of the Iowa Alliance for Information and Referral Systems (Iowa AIRS) have shared community resource data for the pilot communities and are willing to share data for other areas of the state. This collaboration will make expansion of the IRFA to other parts of the state possible.

MCH Population Group: Children

Early Childhood
The Bureau of Family Health, in partnership with Community Empowerment, has developed an early childhood plan through the HRSA Early Childhood Comprehensive Systems grant. The plan will promote the development of community-based comprehensive systems of services that assure comprehensive, coordinated, family centered, and culturally competent care for children.

The Early Childhood Iowa Stakeholder group developed the Iowa Early Care, Health, and Education Strategic Plan. The stakeholder members are responsible for taking the goals, indicators, and strategies back to their constituents. The Early Childhood Iowa Stakeholder members have developed six component workgroups to help move the system planning forward.

Additional information about Iowa's Early Care, Health, and Education Strategic Plan can be found in the state overview section of Iowa's Title V application or on the website: http://www.state.ia.us/earlychildhood/.

Immunization

During the 2005 annual assessments of the public sector immunization providers in Iowa 6,374 records were reviewed. The assessment revealed that Iowa's public sector immunization providers achieved a 94 percent vaccination rate for two-year olds that have received 4 DTP/DTaP, 3 Polio, 1 MMR, 3 Hib and 3 Hepatitis B vaccines on or before 24 months of age. The 2005 assessments were completed using immunization records extracted from the state's Immunization Registry Information System (IRIS). In March 2005, there were 404 clinics participating in IRIS including local public health agencies, Federally Qualified/Rural Health Centers, maternal and child health centers, private practices, and hospitals. There are over 1 million patient records and over 7.7 million vaccinations recorded in IRIS.

Injury Prevention

The IDPH Bureau of Family Health collects monthly data from Iowa's network of child care nurse consultants regarding their activities and contacts with Iowa child care providers. Data identify a main activity, topic, and partners. Three topic codes relate to injury prevention:

- INJ - Injury prevention, intervention, or follow up and relates to the child care nurse consultant (CCNC) working with child care businesses to prevent or intervene on child or employee injuries or conducting hazard surveys
- IPC - Injury Prevention Checklist tool in process by CCNC
- IPCC - Injury Prevention Checklist completed by CCNC

Of all contacts with child care providers over a six-month period, injury prevention was the second most frequent topic.

The U.S. Consumer Product Safety Commission funds an injury prevention pilot project in child care settings throughout northwest Iowa. The funds cover 20 onsite assessments by child care nurse consultants. In addition to the onsite assessment, child care providers complete a brief survey to identify where they purchase equipment and how they learn about recalled products. Since the project's inception in 2003, more than 100 assessments have been conducted. The safety of equipment, toys, and the environment has been assessed for nearly 1500 children in home-based or center-based child care. Based on the results of this pilot project, the injury prevention checklist has been revised and re-approved by the CPSC, and the tool will be rolled out for statewide use at the 2005 Early Care, Health, and Education Congress in November.

The University of Iowa Injury Prevention Research Center conducted the 2004 Iowa Child Passenger Restraint Survey. At 37 locations statewide, 5200 children under the age of six years were observed in motor vehicles. A total of 3683 or 70.8 percent of the children were appropriately restrained, which is a decrease of 13.3 percent from the 2003 survey. This one-year decrease can likely be explained by the decrease of observers (from two to one). Based on the improvements to Iowa's child passenger safety law, future surveys should indicate an increase in appropriate restraints.

Oral Health
During school year 2003-2004, 4,293 children received an examination through seven school-based sealant programs. Over 18,200 sealants were placed. Forty-five percent of the children examined and 75 percent of children receiving a sealant were on the free and reduced lunch program. Overall, 29 percent of children had untreated tooth decay, compared to 35 percent of Medicaid-enrolled children with untreated tooth decay. Twenty-three percent of children were enrolled in Medicaid, 28 percent had private dental insurance, and 26 percent of children had no dental insurance.

The number of children served and the unmet dental needs they present demonstrate the importance of school-based sealant programs. The Title V child health contract agencies funded for school-based sealant programs have been successful in improving the health status of the children they serve. The contractors have also been successful in improving relationships with the dental community in their service areas. Funding school-based sealant programs will continue to be a priority for the OHB.

For the seventh consecutive year, the Iowa Department of Public Health (IDPH) conducted the statewide Oral Health Survey in April 2005. With direction from the IDPH Oral Health Bureau, the survey was conducted by the state's Title V child health contract agencies. The Title V agencies screened a random sample of 1,115 third-grade children in 29 schools. The survey indicated that 43.4 percent of the children had at least one sealant on a permanent first molar. The survey also indicated that 30 percent of Iowa's third graders do not have dental insurance and that it had been more than three years since five percent of the third graders had seen a dentist.

In 2004, the Iowa Board of Dental Examiners adopted a new rule allowing public health supervision of dental hygienists. Hygienists may enter into a collaborative agreement with a dentist to provide services in public health settings prior to a patient being seen by a dentist. The numbers of services provided through public health supervision are to be reported annually to the Oral Health Bureau. Total services provided in 2004 include nearly 12,000 oral screenings, over 1,900 fluoride varnish applications, 157 prophylaxes, and over 10,600 sealants. The number of people receiving preventive dental care through public health demonstrates the need to investigate innovative methods of improving access to dental care.

Nutrition
The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) is designed to improve the health of low-income, nutritionally at-risk pregnant, breastfeeding, and postpartum women, infants, and children to the age of five. WIC is a central component of Iowa's food assistance system. WIC services are provided to more than 68,000 Iowa women, infants, and children every month representing more than 40 percent of all infants born in Iowa and accounting for nearly one in five children (ages 1 to 5) in the state.

The Iowa WIC Program has periodically assessed the extent of food insecurity among the WIC families it serves. In 2003, the Iowa WIC Program assessed the extent of food insecurity among WIC participants using six validated items from the U.S. Household Food Security Survey.

Approximately 56 percent of the respondents were food secure. Of the 43 percent of the respondents who were food insecure, 26 percent were food insecure without hunger and 17 percent of the respondents were food insecure with hunger. The extent of food insecurity among Iowa WIC households was comparable to the results of the Wisconsin Food Security Survey of the WIC population.

Approximately 44 percent of the white respondents were food insecure. Almost 41 percent of the Hispanic or Latino respondents were food insecure. More than 46 percent of the black or African American respondents were food insecure although there were fewer than 100 responses from this group.

After eliminating those surveys that had a pregnant woman in the household, BMI was calculated based on the self-reported height and weight of the respondent. More than 54 percent of the respondents were overweight (BMI=25.0 to 29.9) or obese (BMI≥ 30). Almost 57 percent of the respondents who had a BMI greater than 25 were in households that were food insecure without hunger. Approximately 56 percent of the respondents who were overweight or obese lived in households that were food insecure with hunger. This compares to 40.6 percent of the respondents who were of normal weight (BMI = 18.5 to 24.9) that lived in households that were food insecure without hunger and 40 percent of the respondents who were of normal weight that lived in households that were food insecure with hunger.

MCH Population Group: CYSHCN

Early Identification and Intervention

The MCHB definition of CYSHCN includes children who "…are at increased risk for a chronic physical, developmental, behavioral, or emotional condition." Therefore, as Iowa's Title V Program for CYSHCN, CHSC is involved in population-based efforts at early identification and intervention for Iowa's early childhood population.

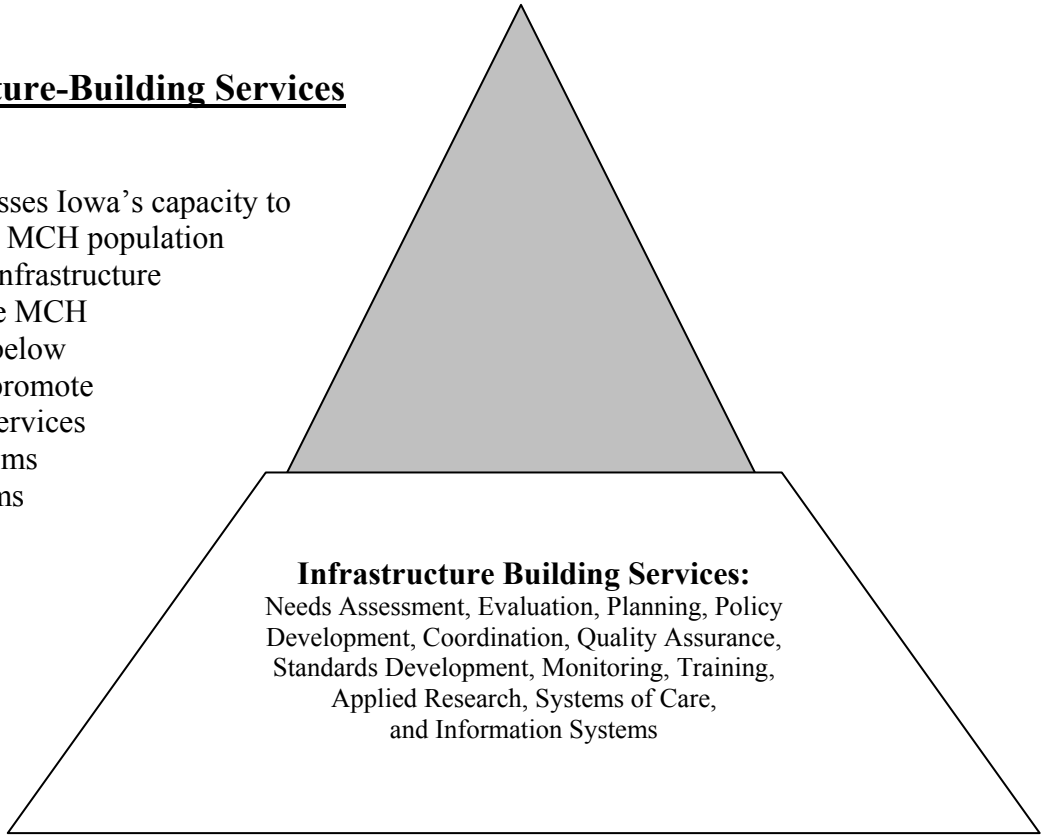
CHSC has based its efforts in population-based risk identification and intervention on belief in the need for organizational partnerships to assure successful outcomes. Therefore, CHSC primarily partners with: the Iowa Department of Public Health on the State Early Childhood Comprehensive Systems (SECCS) project; the Iowa Department of Education on the Early ACCESS (IDEA, Part C) program; and the Iowa Department of Human Services on the Assuring Better Child Health and Development (ABCD II) project. Each of these efforts ultimately has a population-based intent to provide high quality early identification and early intervention services for all Iowa's young children.

Beyond an explicit mission-based dedication to partnerships, the following data further justifies CHSC's partnership activities in the area of population-based early childhood screening and intervention.

Indicator or Survey Item	Indicator Value	Interpretation	Data Source
Medicaid chart audit of primary care provider practices	The audit report states that primary care providers are underperforming with respect to early childhood developmental and mental health screening, anticipatory guidance, referral to early intervention, and linking to care coordinators.	This finding suggests a need to improve the performance of primary care providers in several aspects of early childhood care including developmental screening, referral to early intervention, and provision or linkage to care coordination.	Iowa's EPSDT Care for Kids Developmental Services and Current Issues (Report of the Iowa Dept of Human Services, 2003)
Primary care providers perform routine developmental screening	35% of surveyed primary care physicians report performing routine developmental screening	This finding suggests that nearly ⅔ of young children are not receiving routine developmental screening by their primary care providers. This supports the need to increase physician performance of routine developmental screening.	Health Providers' Capacity to Serve Iowa Children (Report of the Iowa Dept of Public Health, 2000)
Medicaid utilization data regarding developmental screening rates for young children	34-49% of 2-12 month olds and 27-29% of 12-24 month olds enrolled in Medicaid receive developmental screening according to Medicaid database review	Given the increasingly recognized importance of early childhood developmental screening, this data suggests that current screening rates are unacceptably low and must be addressed.	Health Checks for Children Enrolled in Iowa Medicaid (Iowa Foundation for Medical Care, 2000)

II. B. 4. d. Infrastructure-Building Services

The following section addresses Iowa's capacity to meet the needs of the state's MCH population groups as they relate to the infrastructure building services level of the MCH pyramid. The descriptions below identify Iowa's capacity to promote comprehensive systems of services through existing IDPH systems and collaborative mechanisms with other organizations.



MCH Population Groups: Pregnant Women, Mothers, Infants, and Children

Data Capacity

The Iowa MCH Data Capacity Project is funded by a 2004-2006 State Systems Development Initiative (SSDI) grant. The project focuses on Title V Health Systems Capacity Indicator #9(A): the ability of States to assure that the Maternal and Child program and Title V agency have access to policy and program relevant information and data. The project is designed to strengthen system-level data capacity to support the development of systems of care at the community level. The goals of the project are to:

- direct Iowa's ongoing Title V Needs Assessment activities with a focus on the Healthy People 2010 Goal, "Eliminate health disparities for racial and ethnic groups, people with low income, people with disabilities, women, and people in different age groups as compared to the total population";
- evaluate the ability of Iowa's key MCH data systems to provide the statewide program and local contract agencies with policy and program relevant information and data; and
- strengthen Iowa's MCH infrastructure through assurance of the capacity of the MCH data workforce to meet data system development, maintenance, and integration needs.

Objectives for goal one relate to the replication of the Iowa Child and Family Household Health Survey. Objectives for goal two involve formal annual evaluations of MCH data system utility

for statewide and local decision-making. Objectives for goal three focus on strengthening the capacity of the statewide MCH data workforce through activities that enrich knowledge and collaboration skills.

Iowa's ability to utilize MCH data received a boost in FFY05 with the assignment of an MCH epidemiologist from the Centers of Disease Control and Prevention. Dr. Debra Kane began her duties in Iowa in January 2005. Her responsibilities have been carefully determined to coincide with Title V needs and SSDI objectives.

Iowa Child and Family Household Health Survey
The 2000 Iowa Child and Family Household Health Survey was a collaborative effort of the University of Iowa Public Policy Center, the Iowa Department of Public Health, and Child Health Specialty Clinics. The intent of the study was to provide information for policymakers and health planners about the status of families with children in Iowa from a social health perspective. The methodology and analysis of the 2000 Iowa Child and Family Household Health Survey are described in the first section of this document.

The five-year replication of the Iowa Child and Family Household Health Survey will be conducted in the fall of 2005. The 2005 survey is funded, in part, through the State Systems Development Initiative (SSDI) grant described above. Analysis of trend data from the two surveys will increase the state's ability to assess the health of children throughout Iowa. The resulting assessments will be useful for program planning and policy development throughout the next few years.

Early Intervention
In Iowa, the IDEA, Part C program of services to infants and toddlers with disabilities or delays and their families is called Early ACCESS. The Iowa Department of Education serves as Iowa's lead agency. The Early ACCESS improvement plan, resulting from an Office of Special Education Programs (OSEP) evaluation, was completed in July 2004. Efforts to improve the system continue, with an emphasis on strengthening interagency cooperation. A multi-faceted regional monitoring system has been implemented. Each year, all regions complete a self-assessment. One region is selected for a focused monitoring visit, and, as funding allows, one region receives a quality service review. These monitoring activities allow the Early ACCESS state staff to identify areas of non-compliance, strengths, and areas for improvement in regional systems. In July 2005, the Office of Special Education Programs (OSEP) will conduct a site visit to verify Iowa's Early ACCESS data in relation to general supervision requirements for special education. Early ACCESS continues to work toward implementation of a data collection system. The planned data system is expected to address both child-specific and system-wide issues.

Oral Health
Fifteen of 25 child health contract agencies used Title V dental funds in FFY2004 for infrastructure-building activities. During FFY2005, 17 of 25 contractors will use dental funds for these activities. The shift in use of funding from direct services to infrastructure-building services, as well as the varied activities provided, indicate the need for contractors to continue building local oral health infrastructure. In 2004, community activities included:

- booths at health fairs;

- development of dental education packets for day care providers;
- purchase of children's oral health books for dental offices, Head Start centers, and other community programs;
- education for Head Start centers and YMCA after school programs;
- development of program information packets for dental offices;
- contact with dental offices regarding accepting referrals;
- meetings with community partners to discuss strategies for accessing dental care for children;
- participation in community health needs assessment activities;
- staff development meetings;
- coordination of dental billing systems with local dentists;
- oral health presentations to community organizations;
- coordination of preschool field trips to local dental offices; and
- reports to local boards of health on oral health issues.

The Access to Baby and Child Dentistry (ABCD) program is proving to be the most promising program in Iowa for building local infrastructure. The statewide expansion of the ABCD program has resulted in improved dental infrastructure at the local level, illustrating the need for continued funding for such activities. The ABCD program focuses on improving access to oral health services for low-income children ages 0 to 21, with special emphasis on ages 0-5 years. Twenty-one child health contractors have an ABCD program; each has developed an action plan based upon local needs. During FFY2006-2010, all child health contractors will have an ABCD action plan.

An ABCD Best Practice Manual is being developed that will provide a means to share each contractor's successful initiatives and lessons learned. This will be a useful resource not only for the programs within Iowa, but also for other states and communities as they develop similar infrastructure-building programs. Each ABCD program has submitted information about their individual projects. The manual submissions are providing informative assessments of the ABCD program, as illustrated by the anecdotal remarks listed below.

- "The populations public health agencies serve are often invisible to the private providers… It continues to be the role of public health to put a face on this population."
- "The ongoing challenge is just making sure that parent education is a major part of the coordination process…"
- "The [local] Oral Health Initiative was in place but was lacking in leadership and momentum. Through the assistance of the ABCD funding, a facilitator was hired… to complete action steps of the Strategic Plan."
- "Feedback from Head Start and WIC staff has been very positive, and we would like to continue the service.."
- "The biggest lesson learned is to be ready to devote a great deal of time building relationships with local dentists…"
- "…this is a commitment that will require a human resource investment, ongoing collaboration and communication, long range planning, and the ability to see success one small step at a time."

The increased need and ability for contractors to use funds to build local infrastructure will

continue to be a priority during the next five years.

In the spring of 2005, the Oral Health Bureau (OHB) held regional stakeholder meetings throughout Iowa. The meetings, funded by a HRSA State Oral Health Collaborative Systems (SOHCS) grant, were held in Ottumwa, Mt. Pleasant, Corning, Atlantic, Marshalltown, Boone, LeMars, Storm Lake, Mason City, New Hampton, Davenport, and Cedar Rapids. The purpose of the meetings was to gather input from local stakeholders about oral health needs and community capacity to meet those needs. In addition, OHB staff sought recommendations on how to build local capacity and raise awareness about oral health issues. Over 100 people attended the meetings, included representatives from Title V agencies, Head Start, WIC, Boards of Health, dental and medical associations, hospitals, community health centers, and local health coalitions. Several issues were discussed, such as financial barriers to care, recruiting and retaining dentists, health system integration, and improved education of the public and healthcare providers. A summary report will be completed in September 2005. Information gathered at the meetings will assist the bureau in developing oral health demonstration project grants for at least two Iowa communities, also funded by the SOHCS grant.

Dental summits over the past two years have identified similar themes in the oral health needs of Iowans. Identified needs include:

- increasing the dental workforce,
- improving Medicaid and Title V reimbursement for dental services,
- developing an alternative public/private dental insurance plan,
- identifying additional funding sources to improve state infrastructure,
- using non-traditional healthcare providers in assessment of oral health and provision of preventive care, and
- increasing consumers' knowledge of the importance of oral health.

In 2004, the mid-course review of *Healthy Iowans 2010* also allowed an assessment of current needs. The Oral Health chapter workgroup included representatives from IDPH, the Department of Human Services, the University of Iowa College of Dentistry, Iowa Dental Hygienists' Association, public health dentistry, and private foundations. The workgroup determined that the state needs to continue to develop an oral health surveillance system, focus on decreasing incidence of decay for children, increase preventive efforts such as school-based sealant programs and topical fluoride applications, and increase the number of one-year-olds accessing dental care. The chapter revision includes action steps addressing all of these needs.

HRSA grant funds have been used to strengthen collaboration with key state early childhood initiatives. Through this process, the importance of looking to non-traditional healthcare providers to assess oral health of children has become a focus. The OHB will continue to assess this strategy, including meeting with the dental director for North Carolina to discuss "Into the Mouths of Babes". This program engages physicians in providing oral health screenings and fluoride varnish applications to children under the age of three.

MCH Population Group: CYSHCN

Medical Home Model Quality Improvement

The 2000 Iowa Child and Family Household Health Survey asked families of CYSHCN to report the severity of their child's condition using a 0-10 scale where 0 is least severe and 10 is most severe. The table below presents data describing the relationship between mean condition severity rating and existence of a medical home.

Medical Home Status (based on 4-question index)	Mean Severity Rating (0-10 scale, 0 is least severe)
Yes (child has a medical home)	3.73
No (child does not have a medical home)	5.11

The difference in mean severity ratings for the two groups suggests that there is an association between condition severity and existence of a medical home, i.e. parents who report not having a medical home have CYSHCN who are more severely affected than parents who report having a medical home. Because this is cross-sectional data, the causative relationship between medical homes and condition severity cannot be determined. Still, presuming that more severely affected CYSHCN are more likely to need multiple specialty and community-based health-related services, this data supports the increasingly accepted national and state belief that CYSHCN and their families benefit from a medical home model standard of practice.

Data from the National Survey of CYSHCN show that Iowa scores lower than national rates in several important attributes of the medical home model, as displayed in the table below. CHSC interprets these lower rates as justification that spreading the medical home concept among Iowa's primary care providers needs to be a program priority.

Medical Home Attribute	Iowa Rate	National Rate
Child has usual source of sick care	87.9%	90.6%
Doctors communication with other programs was excellent or very good	30.2%	37.1%
Doctors discussed shift to an adult provider	35.0%	41.8%

Several other Iowa rates from the National Survey of CYSHCN were not lower than national rates, but nevertheless were interpreted as unacceptably low. These data represent further evidence of the need to make establishment of medical homes a high priority infrastructure-building effort. The following table displays rates that are interpreted as unacceptably low.

Medical Home Attribute	Iowa Rate
Doctors communication with each other was excellent or very good	54.4%
Effective care coordination was received when needed	42.0%
Child has received guidance and support in transition to adulthood	13.2%

Access to Subspecialty Services

The 2000 Iowa Child and Family Household Health Survey asked families about their need for specialist care in the previous year and, if specialist care was needed, how much of a problem, if any, it was to get the care. The following tables present the results.

Child needed care from specialist?	CYSHCN	All Other Children
Yes	60%	23%
No	40%	77%

Problem getting specialist care?	CYSHCN	All Other Children
Big Problem	12%	2%
Small Problem	11%	8%
No Problem	77%	90%

The two previous tables demonstrate that respondents with CYSHCN report much greater need for specialty services than respondents without CYSHCN and that respondents with CYSHCN have much more of a problem obtaining needed specialty care for their children than do respondents without CYSHCN. These data demonstrate the increased need for specialty services in the lives of CYSHCN and the significant problem it is to obtain those specialty services. The data further support Title V Program activities that seek to integrate the medical home model and structures of subspecialty service delivery.

Early Childhood At-Risk Database

An early childhood at-risk database is an emerging need in Iowa's statewide effort to build an early childhood comprehensive service system. Currently, there is no single database by which at-risk children can be monitored for developmental delay or other adverse outcomes. Without such a database, the risk of young children being lost to follow-up is increased. A systematic and effective approach to tracking at-risk infants and toddlers remains of interest to CHSC, as well as to the Iowa Departments of Public Health, Education, and Human Services. Some questions that must be addressed relate to the structure and location of a centralized database, specific programs' fiscal and operational responsibilities, and expected benefits to the at-risk population. CHSC intends to be a participant in any initiatives to further analyze needs and logistics related to a database for the early childhood at-risk population.

II. B. 5. Selection of State Priority Needs

The process used to assess the needs of the MCH population groups is described in section II.B.3. of this document. The resulting priority needs cover the three major MCH population groups and the four MCH pyramid levels. The table below displays the need statements associated with Iowa's ten new State Performance Measures and their relationships to the MCH population groups and pyramid levels.

Need Statement	MCH Population Group	MCH Pyramid Level
Assure access to pediatric specialty care for all children.	Children and CYSHCN	Direct health Care and Enabling Services
Minimize developmental delay through early intervention services for children 0-3 years.	CYSHCN	Direct health Care and Enabling Services
Assure developmental evaluations are provided to Medicaid enrolled children 0-3 years.	Children; CYSHCN; and Pregnant Women, Mothers, and Infants	Direct Health Care and Enabling Services
Improve the quality of family support and parenting education programs and services.	Children; CYSHCN; and Pregnant Women, Mothers, and Infants	Direct Health Care and Enabling Services
Improve the quality of primary care for children in Iowa.	Children and CYSHCN	Population-Based Services
Assure access to oral health care for children in Iowa.	Children and CYSHCN	Population-Based Services
Assure children enrolled in early care and education programs are in quality environments.	Children; CYSHCN; and Pregnant Women, Mothers, and Infants	Population-Based Services
All children and adolescents should be physically active for at least 30 minutes, limit screen time to no more than two hours, and eat five or more servings of fruits and vegetables each day.	Children and CYSHCN	Infrastructure-Building Services
Reduce the number of infant deaths due to prematurity.	Pregnant Women, Mothers, and Infants	Infrastructure-Building Services
Assure pregnant and parenting women are screened and referred to appropriate mental health services.	Pregnant Women, Mothers, and Infants	Infrastructure-Building Services

II. C. Needs Assessment Summary

DIRECT HEALTH CARE AND ENABLING SERVICES:

1. Need Statement: Assure access to pediatric specialty care for all children.

Analysis of the "2000 Iowa Child and Family Household Health Survey" provided information about the health status and related circumstances of families, both those with and without CYSHCN. Twenty-five percent of families with a CYSHCN had trouble getting specialty care when their child needed it. In contrast, 11 percent of families without a CYSHCN also had trouble accessing specialty care when needed. In the Title V needs assessment prioritization process, stakeholders ranked increased access to pediatric specialty care for all children as the #12 priority need.

2. Need Statement: Minimize developmental delay through early intervention services for children 0-3 years.

According to a report from the U.S. Department of Education, Office of Special Education Programs, Iowa's Early ACCESS system served 1.11 percent of Iowa's 0-1 year old children and 2.07 percent of Iowa's 0-3 year old children in 2004. Thus, Iowa met the OSEP recommendation that early intervention programs serve 1 percent of children 0-1 and 2 percent of children 0-3. In the Title V needs assessment prioritization process, increased access to early intervention services was ranked as the #3 priority need by stakeholders.

3. Need Statement: Assure developmental evaluations are provided to Medicaid enrolled children 0-3 years.

In Iowa, approximately 18,000 children ages 0-3 years need mental health services each year. This means that one in five young Iowans experience the signs and symptoms of mental disorders. According to a Commonwealth Report, "12 to 16 percent of children experience developmental problems, only one-third of those children usually those with the most obvious conditions- are identified in pediatric practices prior to school entry." In the Title V needs assessment prioritization process, increased developmental evaluations for children 0-3 years was ranked as the #11 priority need by stakeholders.

According to data from the "2000 Iowa Child and Family Household Health Survey," thirty percent of families with CYSHCN and four percent of families without CYSHCN required behavioral or emotional care in the previous year. A review of the "Community Health Needs Assessment and Health Improvement Plan" indicates that 14 counties are addressing mental health issues. Examples of priority issues for these counties are: poor access to services and health professionals, limited number of rural psychiatrists for adults and children, and inadequate mental health screening.

4. Need Statement: Improve the quality of family support and parenting education programs and services.

Iowa currently does not have an integrated, comprehensive systemic approach to family support, home visitation, and parenting education. Most of Iowa's local home visiting programs and parenting education programs follow the model that meets the funding requirements. At the local level, Community Empowerment Areas are statutorily required to strive for spending 60 percent of their state funds on family support, home visiting, or parenting education. Community Empowerment Areas use a variety of national models and community-created models. Currently, Iowa supports the HOPES-HFA (Healthy Opportunities for Parenting to Experience Success -- Healthy Families America) model through IDPH. Thirteen counties use this home visiting model. Additional counties use a HOPES-like model for their home visiting program. Counties use the HOPES-like model because of the cost and lengthy accreditation process required by "official" HOPES-HFA Program. There are also 64 Parents as Teachers (PAT) programs throughout the state. The locally designed models generally do not include an evaluation component or preventive health component, both of which are included in more widespread evidenced-based models. In the Title V needs assessment prioritization process, improve the quality of family support and parenting education programs and services was ranked as the #9 priority need by stakeholders.

In the Community Health Needs Assessment and Health Improvement Plan, three counties are addressing parenting and family support issues. These counties will focus on unifying and improving availability of parenting education classes in their communities.

POPULATION-BASED SERVICES:

5. Need Statement: Improve the quality of primary care for children in Iowa.

Iowa's screening plan for preventive health services for children is consistent with standards established by the American Academy of Pediatrics. The periodicity schedule for comprehensive health screening for all children ages 12 months to 6 years includes testing for blood lead levels. Quality improvement reviews of preventive care records for Medicaid eligible children suggest that lead screening is likely to be the last component of the comprehensive screen to be completed. For this segment of the child health population, it appears that there is a correlation between the completeness of the recommended preventive health screen and testing for lead poisoning. Based on this observation, Iowa selected blood lead testing as an indicator of the comprehensiveness of primary care provided to children. The measure of children receiving a blood lead test is identified as a proxy measure for the quality of primary care provide for children.

In 2000, the Iowa Department of Public Health started to examine elevated blood lead rates for birth cohorts. A birth cohort represents children who were all born in a given time period. The percentage of children tested and the prevalence of lead poisoning were determined for children under the age of six years. Data analysis for the 1998 birth cohort was complete as of December 31, 2004. Of 37,262 children born in 1998, 57.1 percent received a blood lead test before the age of six years. Of children who were tested, 7.5 percent had blood lead levels greater than 10

micrograms per deciliter (µg/dL), which is the blood lead level used to define lead poisoning. This is more than three times the national average of 2.2 percent. The Medicaid population is of special concern because the prevalence of lead poisoning in Medicaid children is 2.5 times the prevalence of lead poisoning in non-Medicaid children. In the Title V needs assessment prioritization process, stakeholders ranked improve the quality of primary care for children in Iowa as the #5 priority need.

The Community Health Needs Assessment and Health Improvement Plan from local boards of health indicated that 17 counties are addressing lead screening and follow-up. Most of the counties will focus on educating health care professionals and parents on the importance of lead screening for children under six years old.

6. Need Statement: Assure access to oral health care for children in Iowa.

Access to dental care for low-income families in Iowa is limited due to a number of barriers. These include: lack of financial resources to pay for care, lack of knowledge of the importance of good oral health, lack of dentists willing to see children under the age of three, shortage of dentists participating in the Medicaid program, shortage of dentists within the state, and issues of patient compliance.

In the "2000 Iowa Child and Family Household Health Survey," eight percent of responding families reported there was a time during the previous year that their child needed dental care, but could not obtain it. In the Title V needs assessment prioritization process, increased access to oral health services was ranked as the #6 priority need by stakeholders.

In the Community Health Needs Assessment and Health Improvement Plan, four communities are focusing on access to dental services for children, including Medicaid clients. Most of these communities will work with their community-based MCH agency to help with recruitment of dentists to treat all children at an earlier age.

7. Need Statement: Assure children enrolled in early care and education programs are in quality environments.

Iowa ranks in the top three states for percentage of children under age six whose parents are in the labor force. Seventy-seven percent of Iowa families with children 0-5 years old have both or the only parent working. The increase of working parents in the last decade has resulted in the need for child care arrangements for about 30,000 additional children. In the Title V needs assessment prioritization process, stakeholders ranked improve health and safety in child care and preschool as the #10 priority need.

According to the "2000 Iowa Child and Family Household Health Survey," almost half (46 percent) of Iowa children under age 10 receive child care from someone other than a parent. Four percent of parents of CYSHCN were very dissatisfied with their child care arrangements compared to only one percent of parents of other children. The parents of CYSHCN were more likely than parents of other children to report trouble finding child care when their child was sick

(33 percent vs. 25 percent). About one-third of parents of CYSHCN had difficulty finding child care because of the child's special health care need.

The Midwest Research Consortium on Quality in Child Care documented the status of quality on Iowa's early care and education programs. A 2002 study found poorer quality infant and toddler care in both center-based and home-based care in Iowa compared to other Midwest states. The study concluded that at the time of the survey, Iowa had fewer statewide initiatives to support quality or professional development of the child care workforce than other midwest states.

INFRASTRUCTURE BUILDING SERVICES:

8. Need Statement: All children and adolescents should be physically active for at least 30 minutes, limit screen time to no more than two hours, and eat five or more servings of fruits and vegetables each day.

According to the "2002 CDC Pediatric Nutrition Surveillance System," 30 percent of low-income children aged 2-5 years in Iowa are overweight or at risk of becoming overweight and 61 percent of Iowa adults are overweight or obese. In Iowa, the obesity rate in adults has increased by 70 percent from 1990 to 2002. In the needs assessment prioritization process, stakeholders ranked improve physical fitness of children as the #4 priority need.

A review of submitted Community Health Needs Assessment and Health and Improvement Plans revealed a collective top priority of related factors: overweight, nutrition, and physical activity. There are 63 counties focusing efforts around these issues.

9. Need Statement: Reduce the number of infant deaths due to prematurity.

Infant mortality is a critical indicator of the health of a population, as it reflects the overall state of maternal health, as well as the quality and accessibility of primary health care available to pregnant women and infants. Advances in medical technology and access to care have produced declines in infant mortality rates across the country, including Iowa. In the Title V needs assessment prioritization process, reduce infant mortality was ranked as the #8 priority need by stakeholders.

Provisional data for calendar year 2004 point to a potential decrease in the rate of infant mortality per 1,000 births, from 5.7 in 2003 to 5.0 in 2004.

In the Community Health Needs Assessment and Health Improvement Plan, 15 counties are addressing prenatal care and birth outcomes.

10. Need Statement: Assure pregnant and parenting women are screened and referred to appropriate mental health services.

The IDPH Women's Health Information System contained records for 10,241 women in 2003. The top needs listed by the women were mental health services (10.5%) and domestic violence assistance (4.8 percent). In the Title V needs assessment prioritization process, increase mental

health providers for pregnant and postpartum women was ranked as the #13 priority need by stakeholders.

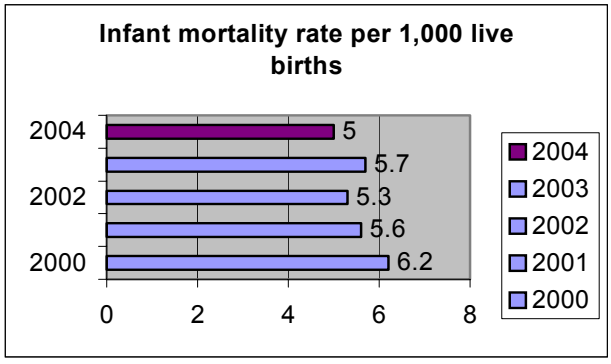
A review of the Community Health Needs Assessment and Health Improvement Plan indicated that 14 counties are addressing mental health issues, such as poor access to services and health professionals, limited number of rural psychiatrists for adults and children, and inadequate mental health screening.

II. D. Health Status Indicators

Iowa used the health status data to provide additional indicators of the health status of children, pregnant women, and children and youth with special health care needs. Iowa looks at the HSI data to monitor progress in the infrastructure of maternal and child health services. Review of Health Status Indicator data included as part of a more comprehensive analysis for the Healthy Iowans 2010 Midcourse Review.

II. E. Outcome Measures

This report discusses Iowa's progress toward the six Outcome Measures. No additional state Outcome Measures were added. The report discusses relationships between State program activities, National Performance Measures, and State Performance Measure to the Outcome Measures



OM# 1 The infant mortality rate per 1,000 live births. (FFY04 target=5.8)

The total infant mortality rate for Iowa shows a decrease for 2004. Provisional data for 2004 show a rate of 5.0. This is a decrease of 0.7 from 2003.

National Performance measures 1, 7, 10, 14, 15, 17, 18 and State Performance Measure 3 contributes to achieving this Outcome Measure.

OM# 2 The ratio of the Black infant mortality rate to the White infant mortality rate. (FFY04 target=2.9)

The ratio of Black infant mortality rate to White infant mortality rate decreased from 3.8 in 2003 to 2.0 in 2004. (2004 provisional data) The Black infant mortality rate is 9.6 and the White infant mortality is 4.8. The activities of the Infant Mortality Prevention Center, and Healthy Start of Visiting Nurse Services of Polk County, contributed to the rate decrease. Small numbers for minority populations continue to present challenges for effective monitoring of this objective.

Performance Measure SPM #14 contributed to achieve this outcome measure.

OM# 3 The neonatal mortality rate per 1,000 live births. (FFY04 target=3.3)

The neonatal mortality rate for 2004 provisional data was 3.2 per 1,000 live births. This is the first time in three years that Iowa has seen a decrease in the neonatal mortality rate. Strategies and recommendations developed by the Iowa Child Death Review Team will be used to address neonatal mortality. The CDRT recommendations can be found at http://www.idph.state.ia.us/do/legis/child_death.pdf

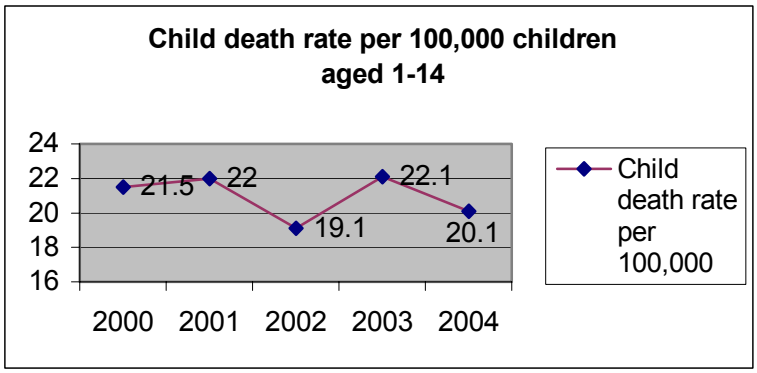
OM# 4 The postneonatal mortality rate per 1,000 live births. (FFY04 target=1.9)

The number of postneonatal deaths decreased from 2.1 deaths per l,000 live births in 2003 to 1.9 deaths in 2004 provisional data. Performance measures as identified in Outcome Measure #1 apply.

OM# 5 The perinatal mortality rate per 1,000 live births. (FFY04 target=10.0)

Perinatal mortality rates have stayed about the same since 1999. The 2004 provisional data shows rate of 8.6 per 1,000 live births.

OM# 6 The child death rate per 100,000 children aged 1-14. (FFY04 target=21.6)



The total number of child deaths decreased based on 2004 provisional data. The rate decreased from 22.1 in 2003 to 20.1 in 2004. Efforts to prevent unintentional injury of children and adolescents are currently concentrated in the IDPH Bureau of Disability and Injury Prevention.

Activities of the Child Death Review Team continue to identify causes and recommendations for the reduction of child deaths throughout the state. The CDRT Report can be found at http://www.idph.state.ia.us/do/legis/child_death.pdf

National Performance Measures 1, 7, 10, 13, and 14 and State Performance Measures 3 contribute to achieve this Outcome Measure.